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ABSTRACT

Project CoNECT (Collaborative Network for Early Childhood Training) provided preservice and inservice training to help multidisciplinary personnel better serve young, severely handicapped children. The project, which was divided into three subcomponents, utilized univerisity-based training as well as field-based training. In Subcomponent I, personnel new to the field of education of young, handicapped children were enrolled in an eight-course sequence with a two-credit practicum for student teaching with preferential placement in the collaboratives. Successful completion of the program resulted in the Master of Education degree and the Massachusetts teaching certificate, "Teacher of Young (3-7 years) Children with Special Needs." Twenty teachers were trained under the full or partial auspices of Project CoNECT. For Subcomponent II, liaisons with four educational collaboratives provided ongoing, professional and paraprofessional, multidisciplinary consultation addressing educational programming and staff training needs. Among training competencies addressed were: assessment and remediation in a developmental framework; curricular modifications for young, severely handicapped children; classroom and behavior management strategies; and consultation and communication skills for collegial and parent-staff teamwork. In Subcomponent III, a summer institute, "Medical and Rehabilitative Aspects of Childhood Disorders," was held. Serving to update the multidisciplinary professional and paraprofessional staff of the collaboratives in this project and the program's Master's degree candidates, the institute addressed current efforts in diagnosis, medical treatment, and rehabilitation techniques with severely and multiply handicapped children. The management by objectives approach guided the implementation and evaluation activities of Project CoNECT. The summary evaluation, based upon the analysis of process and product data, demonstrated the Project's effectiveness. Additional findings led to recommendations to provide for consultation to administrators and provide processes by which valuable information can be exchanged efficiently among collaboratives. (Author/CL)

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Appendices

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Project CoNECT owes its success to the dedicated efforts of a number of individuals:

Penny Axelrod, Ed.D. served ably as founder and then co-director of the first year of the project. She was greatly missed these last two years.

Ellen Horvitz, M.Ed. coordinated our excellent preservice programs and provided consultation to participating collaboratives with unbounded energy and enthusiasm.

Kathleen Donnellan, M.A. served competently and tirelessly as a supervisor and consultant, providing highly regarded in-service training.

Sandra Baer, M.Ed. coordinated our Summer Institutes, making them one of our most successful events.

Marjorie Manning, A.B. -- from the hatching of the idea of CoNECT to the send-off of this final report -- gave the role of "administrative assistant" magnificent dimension. Her organization, support and expertise are continually counted upon and called upon.

Ruth Marotta, A.B. made the budgeting process almost bearable with her careful and responsive bookkeeping and also served ably as curator of the Curriculum Resource Laboratory.

Patricia Place, M.Ed., doctoral candidate in our department, served as a Fellow on Project CoNECT this past year and, with much skill and perseverance, executed most of the program evaluation documented in this report.

It has been my distinct pleasure and honor to work with these fine professionals.

* * * * * *

We also appreciate the contributions and support provided by the faculty and staff of the Eliot-Pearson Department of Child Study, Tufts University.

Members of the Advisory Board, listed in Appendix I, are gratefully acknowledged for their time and guidance offered in support of Project CoNECT.

Most importantly, our partners -- the administrators, staff, students and families of the Special Education Collaboratives that comprise Project CoNECT:

C.A.S.E. (Concord Area Special Education) Collaborative

The EdCo Brookline-Newton Preschool Program

North Shore Special Education Consortium

Shore Collaborative

Our respect, admiration, gratitude and hope for future collaboration!

Donald Wertlieb, Ph.D.
Project Director
December 28, 1984

SECTION A – BUDGET CATEGORIES 1981-82

OBJECT CLASS CATEGORIES	PROJECT SUBCOMPONENTS (TITLES) 1. M.Ed. Training Program	2. Inservice	3. Summer Institute	4.	5.	6. TOTAL
Personnel	$14,408	$ 15,432	$ 5,300	$	$	$35,140
Fringe Benefits	2,867	3,071	1,055			6,993
Travel	940	940	---			1,880
Equipment	---	---	---			
Supplies	400	300	300			1,000
Contractual	---	---	1,100			1,100
Student Financial Assistance	10,000	---	---			10,000
Consultants	350	150	---			500
Other	800	800	200			1,800
Total Direct Charges	29,765	20,693	7,955			58,413
Indirect Charges (8% maximum)	2,381	1,655	636			4,672
TOTAL	$32,146	$ 22,348	$ 8,591	$	$	$63,085

SECTION A – EXPLANATIONS

ED Form 9047, 7/80

SECTION A – BUDGET CATEGORIES 1982-83

OBJECT CLASS CATEGORIES	PROJECT SUBCOMPONENTS (TITLES) ** 1. M.Ed. Training Program	2. Inservice	3. Summer Institute	4.	5.	6. TOTAL
Personnel	$(11,446) 3,600	$ (11,447) 3,600	$ (0) 4,778	$	$	$ (22,893) 11,978
Fringe Benefits	$ (2,278) 716	$ (2,278) 717	(0) 951			(4.556) 2,384
Travel	(550)	(100)	(50)			(700)
Equipment	–	–	–			–
Supplies	(225)	(200)	(75) 350			(500) 350
Contractual	–	(400)	(0) 1,200			(400) 1,200
Student Financial Assistance			(0) 1,500			(0) 1,500
Consultants	(200)	(100)	(100)			(400)
Other	(300) 100	(200) 100	(95) 200			(595) 400
Total Direct Charges	(14,999) 4,416	(14,725) 4,417	(320) 8,979			(30,044) 17,812
Indirect Charges (8% maximum)	(1,200 353	(1,178) 354	(26) 718			(2,404) 1,425
TOTAL	$ (16,199) 4,769	$ (15,903) 4,770	$ (346) 9,697	$	$	$ (32,448) 19,237

SECTION A – EXPLANATIONS

** Current budgeted dollars are in parentheses.
Proposed allocations of supplement are indicated below currently budgeted amounts

OMB APPROVAL NO. 3086 -0049

PART III – BUDGET INFORMATION

SECTION A – BUDGET SUMMARY

GRANT PROGRAM, FUNCTION OR ACTIVITY (a)	FEDERAL CATALOG NO. (b)	ESTIMATED UNOBLIGATED FUNDS		NEW OR REVISED BUDGET		
		FEDERAL (c)	NON-FEDERAL (d)	FEDERAL (e)	NON-FEDERAL (f)	TOTAL (g)
1.		$	$	$	$	$
2.						
3.						
4.						
5. TOTALS		$	0	$	0	$

SECTION B – BUDGET CATEGORIES 1983-84

6. OBJECT CLASS CATEGORIES	GRANT PROGRAM, FUNCTION OR ACTIVITY				TOTAL
	(1)	(2)	(3)	(4)	(5)
a. PERSONNEL	$	$	$	$	$ 34,937
b. FRINGE BENEFITS					6,953
c. TRAVEL					1,810
d. EQUIPMENT					-
e. SUPPLIES					1,400
f. CONTRACTUAL					1,100
g. CONSTRUCTION					-
h. OTHER					1,697
i. TOTAL DIRECT CHARGES					47,897
j. INDIRECT CHARGES (8%)					3,832
k. TOTALS	$	$	$	$	$ 51,729
7. PROGRAM INCOME	$	$	$	$	$

HEW-608T

ABSTRACT

Final Report

Project CoNECT
Multidisciplinary Training for Educators of Young (3-7)
Severely Handicapped Children

In response to Massachusetts and Federal personnel training needs, the Eliot-Pearson Department of Child Study at Tufts University developed Project CoNECT (Collaborative Network for Early Childhood Training), a project which provided preservice and inservice training to multidisciplinary personnel so that they could better serve young, severely handicapped children. The Project, which was divided into three subcomponents, utilized University-based training as well as field-based training in four Massachusetts educational collaboratives which are the most common providers of educational programs for young, low-incidence, handicapped children.

In Subcomponent I, personnel new to the field of education of young, handicapped children were enrolled in an eight-course sequence with a two-credit practicum for student teaching with preferential placement in the collaboratives. Successful completion of the program resulted in the Master of Education degree and the Massachusetts teaching certificate, "Teacher of Young (3-7 years) Children with Special Needs." Twenty teachers were trained under the full or partial auspices of Project CoNECT.

For Subcomponent II, liaisons with four educational collaboratives provided ongoing, professional and paraprofessional, multidisciplinary consultation addressing educational programming and staff training needs. Among train.ng competencies addressed were: assessment and remediation in a developmental framework; curricular modifications for young, severely handicapped children; classroom and behavior management strategies; and consultation and communication skills for collegial and parent-staff teamwork. Subcomponent II also provided activities that foster communication among collaboratives with integrative staff development efforts.

In Subcomponent III, a summer institute, Medical and Rehabilitative Aspects of Childhood Disorders, was held in 1982, 1983 and 1984 at the Tufts-New England Medical Center Hospital with speakers from that staff and use of the hospital and clinic facilities for observation. Serving to update the multidisciplinary professional and paraprofessional staff of the collaboratives in this project and the program's Master's degree candidates, the Institute addressed current efforts in diagnosis medical treatment and rehabilitation techniques with severely and multiply handicapped children. Institute participants had the opportunity to interact with one another and to refine their skills in effective, multi-disciplinary team communication and process.

The "Management by Objectives" principles guided the implementation and evaluation activities of Project CoNECT. The summary evaluation, based upon the analysis of process and product data, demonstrated the Project's effectiveness. One point which has become abundantly clear is that this type of consultation and inservice training should be an ongoing and integral part of early childhood special education programs. Additional

findings lead to recommendations to provide for consultation to administrators and provide processes by which valuable information can be exchanged efficiently among collaboratives. We remain impressed with the salience of knowledge of child development as a framework for special education training and service.

Section I

Project CoNECT

Multidisciplinary Training for Educators of Young (3-7 years) Severely Handicapped Children

Introduction

The Eliot-Pearson Department of Child Study, with the support and collaboration of Federal agencies, (Department of Personnel Preparation in the Office of Special Education [OSE] and the National Institute of Mental Health), Tufts University and local educational agencies, has been innovative in special education personnel preparation. Our interdisciplinary department in a major university in a major metropolitan area allows for programming of exceptional quality. Our tradition of commitment to education and special education as "applied child development" provides a conceptual coherence well suited to the sophisticated and complex demands of teacher training as well as allied training endeavors in education and psychology.

For the past twelve years, under OSE (BEH) - DPP grants, the Department has developed, implemented and evaluated four teacher preparation programs. These are Bachelor of Arts and Master of Education programs leading to Massachusetts certification as "Teacher of Children with Moderate Special Needs," "Generic Consulting Teacher," and, our newest certification, "Teacher of Young (3-7) Children with Special Needs." As the need for continuing education for educators and/or clinicians for children with special needs has been recognized, each of these programs has increasingly emphasized professional staff development and inservice training. This latest project, Project CoNECT (Collaborative Network for Early Childhood Training), continued our tradition of simultaneously providing pre- and in-service training. Our experience in preservice and inservice training and with the changing context of needs and priorities at the Federal, State and local level provided a framework for Project CoNECT, a three-subcomponent project under the United States Office of Special Education, Department of Personnel Preparation.

Our purpose was to elaborate a model of preservice and inservice teacher training in accord with current national, State and local needs as articulated in OSE priorities and the Massachusetts Comprehensive System of Personnel Development (CSPD) (see Appendix A). These needs and priorities were the following:

early childhood focus (State certification, "Teacher of Young [3-7] Children with Special Needs")

severe and multiple handicaps

multidisciplinary approaches

general special education

paraprofessional as well as professional audiences

model implementation and evaluation

attention to "hidden handicaps" and "other health impaired" (OHI) conditions

involvement of consumers, including parents.

Between 1981 and 1984, Project CoNECT prepared fifteen M.Ed. and five Bachelor-level "Teachers of Young Children with Special Needs." These individuals are now equipped to function in private and public schools (including mainstreamed and self-contained settings) and hospital-, institution- or home-based early intervention and education projects. In addition, the Project's inservice efforts provided intensive support and training for between 80 and 100 professionals and paraprofessionals currently serving severely and multiply handicapped children in self-contained, special education settings in eastern Massachusetts. These individuals should now be able to function more competently and effectively than before in their current settings and/or enabled to advance professionally in related settings. Specific evaluation data to be presented below document this assertion. In addition to training these target populations, Project CoNECT supported courses reaching a large number of undergraduate and graduate students not committed to special education certification programs.

Our hope was that each member of this preservice and inservice audience would appreciate the importance of a knowledge of child development as a framework for best meeting the needs of these under-served children. Assessment, remediation, curricula and management are all guided by basic principles of intellectual, socio-emotional and physical development and maturation. By necessity such endeavors are multidisciplinary, involving the expertise of such diverse fields as education, psychology, pediatrics, neurology, speech and language pathology, and physical and occupational therapy. They are, therefore, fraught with obstacles which can be overcome only with focused and sustained attention to the communication and consultation processes inherent in such collaborations. Thus our training philosophy acknowledged a common base in an appreciation of the principles and data of child development and in a commitment to enhancing interdisciplinary communication in the service of multidisciplinary individualized educational planning.

Each of the three subcomponents of Project CoNECT is described in the evaluation report below. Basically, these subcomponents include:

1. A university-based M.Ed. program leading to certification as a "Teacher of Young (3-7) Children with Special Needs." This certification was introduced in Massachusetts in September, 1979.
2. A program of inservice staff development and continuing education in cooperating special education collaboratives and consortia.* The program emphasized developmentally based multidisciplinary and comprehensive approaches to educating young children (ages 3-7)

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* Special education consortia and collaboratives are networks of self-contained classrooms and clinical-service components (e.g., speech and lanaguage therapy, physical therapy, occupational therapy) established in order to meet the educational needs of children with a variety of low-incidence and/or severe handicaps. These consortia and collaboratives represent a pooling of resources and responsibility by a group of neighboring towns or LEA's. Hereafter, "collaboratives" refers to both these consortia and collaboratives.

with severe special needs. Cooperative planning by administrators, teachers and clinicians served as the vehicle for the consultation and staff development, which was designed to enhance individual as well as systemic effectiveness.

3. "Medical and Rehabilitative Aspects of Childhood Disorders," an eight-day summer institute for integrative and transdisciplinary training in the education of young children with severe special needs. The summer institute format was selected to maximize integration of training and curriculum based at the Tufts-New England Medical Center.

Before elaborating upon each component, we would like to highlight some important dimensions of our approach to personnel preparation and responsiveness to Federal and State priorities. The Project operated from the assumption that a strong knowledge base in child development is an essential factor in quality special education. Indeed, special education is "applied child development." By implication and extension, it involves a commitment to interdisciplinary and transdisciplinary training with particular attention to the convergence of psychology and education and explicit appreciation of the contributions of fields as diverse as medicine, speech and language pathology, neurology, sociology, occupational therapy and law. Both in-service and preservice endeavors embody this multidisciplinary approach to child development and its application in special education.

A recently instituted M.Ed. program in the Eliot-Pearson Department of Child Study leads to certification as "Generic Consulting Teacher." Elements of its curriculum, developed and evaluated in prior training efforts, were used in Project CoNECT. The Project used the framework of the "Teacher of Young Children with Special Needs" certificate, a recently established certification designed to meet the State's personnel needs (see Appendix B).

Project CoNECT focused on preparing teachers of those children with severe and multiply handicapping conditions. Most recent State and Federal priorities give greater recognition to this underserved population than they did formerly. One of our central concerns was the extent to which the training models, successful in preparing teachers of mild-to-moderately impaired children, could be applied in the settings serving more disabled children.

Besides the fact that the children in these settings are traditionally underserved, our needs assessment reported in our original and continuation proposals suggests that the paraprofessional and professional staffs of these special education collaboratives are often isolated and underserved as well. Suitable, sufficient and appropriate staff development and ongoing consultative support have not been available to them. Project CoNECT responded to this need.

Having provided preservice and inservice training to early childhood special educators for three years, Project CoNECT conducted an extensive program evaluation. The findings of this evaluation confirm the importance and impact of this type of training. The management-by-objective principles guided the implementation and the evaluation of Project CoNECT. The report which follows specifies the objectives addressed, the activities chosen to accomplish the objectives, and the evaluations of each objective.

The report is designed to expedite its perusal by various audiences. If one is interested in a summary perspective on the effectiveness of this project during its three years, one need read only Section II, the Final Project Evaluation. Specific types of information, and the sections where they can be found, are listed below:

Eliot-Pearson preservice training: Section III

On-site consultation and inservice training to collaboratives' staffs: Section IV.

Summer Institutes: Section V.

The separation of evaluation data into these sections should facilitate access to specific information sought by the reader. If one is primarily interested in the implementation and effectiveness of continuing on-site consultation, one might peruse Section IV only. One interested in the impact of short-term course-like training may only review Section V. Providers of preservice training are able to focus solely on Section III to acquire the information relevant to them. Appendices offer additional details about the Project's activities and evaluations and complement the text.

Section II

Three-Year Evaluation of the Impact and Effectiveness of Project CoNECT on Collaboratives

In the third year of Project CoNECT's grant, evaluation questionnaires were sent to approximately 40 eligible people in the four participating collaboratives. Three directors (including top and/or middle-management professionals) and five teachers returned these evaluations. Although a self-addressed, stamped envelope was sent with each questionnaire, and anonymity ensured by not requesting identifying information other than professional role, repeated efforts, through personal and telephone contact failed to increase the low response rate. This rate was a severe constraint on generalization of the findings reported below.

Evaluation of Inservice Training and Consultation

When asked about the frequency of their contacts with Project CoNECT, two teachers reported that the Project consultant provided on-site consultation every two weeks, two reported visits every month, and one reported having received visits once or twice a semester. Two directors reported on-site visits with the consultant once a month, and one reported contact once or twice a year.

On-site workshops were provided by the Project consultant once or twice a semester, according to one teacher, and once or twice a year according to another. Three teachers and one director said that they did not participate in any on-site workshops. Workshops were reported as occurring once a month by one program director and once or twice a year by the third. The frequency of on-site workshops varied among collaboratives because the terms of each consultation contract were different. Some collaboratives did not request group workshops, preferring individual contacts. This fit well with our commitment to individualizing services.

There was variety in the frequency of phone contacts. The four teachers reported respectively that they talked with the consultant once a week, once every two weeks, once a month, and once or twice a year.

The fifth teacher did not respond to this item. Directors also reported varying frequencies of phone contact from once a month to once or twice a year.

Three of the five teachers reported having visited the Eliot-Pearson Department of Child Study at Tufts once or twice a year. Usually these visits were made to investigate resources in the curriculum laboratory. Another respondent said she visited the Department once a week. One teacher did not respond. Two directors visited the Department once or twice a year. The third did not respond to this item.

Two teachers visited other participating collaboratives once or twice a year, as did two directors. The other four respondents did not answer this question.

Four of the five teachers responded that their contacts with the Project were frequent enough, and the fifth said that they were not frequent enough. All three of the directors agreed that their contacts were too few. Because the population to which the Project was directed was the direct-service personnel in early childhood special education classes, it is evident that the grant's objective was accomplished. The responses from the directors indicated a need for an expanded target population, beyond the scope of this particular project. It is imperative, however, that this need be addressed in future efforts like Project CoNECT.

The recipients of the Project's services were asked to comment upon how they had benefited from their contact. The teachers' responses follow.

- Project CoNECT has helped me develop abilities to better integrate normal development into classroom programs, individual issues, provided support in varied ways (re curriculum, consultation, training) that has added to my skills and teaching confidence.

- The Project CoNECT consultant has led meetings last year and the year before for teachers. She brought excellent written materials (handouts) and books on programs for the severe special needs children. It was helpful for her to observe the classrooms and give feedback on goals being addressed.

- Having contact with other collaborative teachers, through the Summer Institute and workshops, and the on-site observations and meetings with the consultant provided much needed support.

- The Project consultant has served as a valuable resource in the areas of computer software, coactive movement programming, and objective observations of students.

One director simply responded that the Project had been of benefit. Another said the Project had "helped provide valuable inservice and new ideas." Another expanded, "The staff (and therefore the children) have learned and benefited much from the consultant's comments, observations, and suggestions."

Three teachers stated that the contacts they had had with Project CoNECT were extremely useful, and the remaining two said they were very useful. No one responded that the contacts were somewhat or not very useful or that they could have done their jobs just as well without the contacts. Program directors also agreed that the Project had been extremely useful (one respondent) or very useful (two respondents).

Three teachers reported that the contacts were extremely relevant and that the consultants were always available when they were needed. Two teachers said the contacts were very relevant, and two also said that the contacts were usually available within a short while after the request had been made. Directors also rated contacts as relevant and timely.

Four out of the five teachers and one director found it very easy to obtain Project CoNECT's services. The remaining teacher said she had found it somewhat easy, as did two of the directors.

When the staffs were asked to check what skills and/or knowledge they had been helped to develop, four teachers indicated they had increased their knowledge about program planning for exceptional children, improved their problem solving skills and identified new methods and materials for instruction. Three teachers indicated increased competence in obtaining

information from outside agencies, and two checked progress with assessment devices and techniques. Topics such as normal child development, staff/role assignments, and mainstreaming were cited by one teacher each. Two directors responded to this item, both citing improvement in knowledge of exceptional-child development. Topics such as normal-child development, curriculum, assessment, and staff-role assignments were also mentioned.

Two teachers indicated that their expertise had been "significantly improved" whereas three said "somewhat improved." Specifically, they noted these changes:

- Review how programs are scheduled into the day and look at different ways to address a child's goals. Try to continually think of creative ways to address the child's needs.

- In the process of changing schedule to incorporate a specific activity each day to promote social interactions among the children in the class.

- Finer points of individual differences within our mainstreamed classroom now apparent, using Brigance Inventory, better understanding/use of classroom design in terms of physical space, learning centers, materials available.

- Use of coactive movement program. Beginning to use computer software with student and pursuing complete evaluation.

Since the focus of change was directed to the teachers, directors did not report specific changes but did indicate that their expertise had been somewhat improved. One director did comment that team teaching, active stimulation, and curriculum development were of significant benefit. This director had specifically requested direct consultation because she was an occupational therapist whc had been appointed recently as director of the program.

Evaluation of Intercollaborative Workshops

Four major intercollaborative workshops were offered to the collaboratives' staffs during the Project CoNECT grant. Each workshop was designed to meet a specific, identified need common to most of the four collaboratives.

Each workshop was evaluated upon completion of the session. These detailed evaluations are presented under the specific objectives which they addressed and are included in Section IV, which specifically analyzes objectives relevant to all four collaboratives. For specific details, please see the reviews of "Families Under Stress," "Focus on Special Siblings," "Unique and Innovative Aspects of Collaboratives' Programs," and "The Post-Trauma Child" in that section. The retrospective three-year evaluation surveyed the global responses to these workshops.

Staff from every collaborative attended at least one of the four inter-collaborative workshops presented by Project CoNECT. One teacher attended two workshops; two attended three of them; and one person attended all four. Similarly, one director attended only one workshop, one came to two, and the third respondent attended three of the four.

The respondents were asked how much impact these workshops had on their practice. The teachers indicated that the most recent workshop, "Unique and Innovative Aspects of Collaboratives' Programs," had the most impact. The mean score for this workshop was 1.4 on a scale of 1 (most impact) to 4 (least impact) on teaching skills and knowledge. The workshop that was rated as having the second highest impact was the February, 1983, session, "Focus on Special Siblings," with a mean score of 2.2. Third rated was the workshop "Families Under Stress," held in May of 1982, with a mean of 2.3. The least-attended session, "The Post-Trauma Child" (with only one teacher responding to the survey) earned a 4 from that respondent.

Directors preferred the session "Focus on Special Siblings," giving it a mean score of 1.3, the "Families Under Stress" workshop coming in second with a mean score of 1.5. One respondent attended the session called "Unique and Innovative Aspects of Collaboratives' Programs" and scored it at 3, while giving the "Post-Trauma Child" session a 4.

In addition to the specific impact of workshops, teachers were asked

to determine the overall usefulness of these events. Four of the five teachers indicated that the workshops were somewhat useful, and one thought they were very useful. Two of the directors called them "effective," one reported them "very useful," and one chose "somewhat useful."

Project CoNECT was especially interested to learn whether anyone had made specific changes as a result of participation in these workshops. The following comments were offered by teachers:

- Presented a workshop to parents of students on siblings of special needs students.

- Rearranged classroom to keep in mind convenience of materials, efficiency with time, traffic patterns. Focused on themes to concentrate on for each child. Utilized different testing materials, i.e., Brigance.

- Set up occasional meetings with sixth grade helpers to answer their questions about class, individual students.

Two directors also recorded specific changes. One director had also been involved in presenting a parent workshop on siblings of special needs students, another reported referring siblings to a sibling group at a local agency and changing some teaching methods with a post-trauma child. That the workshop participants were able to delineate specific actions prompted by their attendance suggests that they transferred and applied the knowledge.

Intercollaborative communication was a primary focus for Project CoNECT's activities, as can be seen from the workshop, "Unique and Innovative Aspects of Collaboratives' Programs" and the encouraging of visiting among collaboratives. Two of the five teachers indicated having made one intercollaborative visit. Two said they had not been able to make visits. One respondent said she wanted to visit other sites but has been unable to do so. The directors appeared to have more mobility. One reported having made three or more visits, one reported one visit, and only one reported being unable to make visits. It is interesting to note, given the

actual statistics, that three of the four teachers who responded to this item thought that intercollaborative visits were "very valuable," while the fourth respondent said she thought they were "somewhat valuable."

Three teachers responded that Project CoNECT facilitated these visits "somewhat," and two said that it did not. No teacher indicated that the Project had provided "very much" assistance in this regard, although one director did say that the Project had "very much" facilitated her visits, and two others reported some assistance.

Discussions between Project consultants and the collaboratives and among Project staff identified some concerns and patterns. Teachers, as has been documented, want to visit other collaboratives but are, for the most part, unable to do so. Future efforts might consider providing substitutes so that teachers could leave their classes to observe other programs. The Project staff might include a teacher who could substitute while the collaborative teacher was involved in an inservice or intercollaborative visit. Liability issues would have to be addressed, however, to allow this. Alternatively, funds might be made available to reimburse substitutes normally hired by the school. From the teachers' responses, it appears that these more active approaches would be considered invaluable. Since the directors unanimously agreed on the value of intercollaborative visits and exchanges, providing a service such as one of these two approaches would be in accordance with their views and would significantly complement the already established value of on-site consultation. There were indications that liability and union issues might be involved, so Project CoNECT was unable to provide this service.

Summer Institutes

Project CoNECT provided inservice training through on-site consultation, workshops, and intercollaborative exchanges. The fourth component of training was called the Summer Institute. Evaluation specifics dealing with this

topic are included in Section V. General impressions were gleaned from the participants in the three-year evaluation survey.

Four of the five teachers responding to the final evaluation attended an Institute, as did two of the three directors. The popularity and superior quality of this summer inservice program are remarkably demonstrated by responses from both teachers and directors. Each of the respondents called the Institute "very valuable."

When asked to describe in what areas this institute had contributed to their knowledge, teachers commented:

- [I gained a] better understanding of medical issues as well as what actual evaluations are like.
- [I gained knowledge about] basic neurological development, better understanding of referral process, issues involved in seizure detection/control.
- I especially enjoyed the summer institute. It was helpful to have contact with those directly involved with the medical issues which affect the children in my class.

One director specified that the Institute had contributed to his/her "knowledge of resources at Tufts [and about the] service delivery system to handicapped children."

Both these generalized comments and the detailed evaluations completed at the end of each course attest to the value of the Institute. When teachers acclaim a summer course and attribute changes to their participation in it, attention must be given to the potential importance of this type of inservice training. The response suggests that comprehensive summer programs like this institute should be seriously considered by agencies involved with the training of special educators and administrators.

General Impressions

To acquire summative evaluation data about how teachers felt about their participation with Project CoNECT, we asked respondents open-ended questions about the Project. The question, "When you speak of your contacts

with Project CoNECT to your friends/colleagues, what do you say?" elicited the following responses:

- [I] haven't discussed it very much. I did feel that [Project CoNECT consultant] was well organized and knows her material well. She is good at leading meetings.

- It has been very helpful to have an objective observer available to consult/problem-solve with. Project CoNECT has successfully facilitated contact between collaborative teachers. Offered an excellent summer institute.

- [I] consider it a resource contact that offers a chance to develop in many areas/techniques because of the Project's supportive nature as well as the availability of outside resources (i.e., curriculum, ancillary services, readings, information) to Project staff.

- I have been given a chance to meet other teachers and share information. The Project has given me a consultant to work with on specific issues.

All three directors had answers to this question.

- [I think that] the consultation has been extremely valuable to the staff.

- [The Project was] helpful in developing a training/volunteer program for sixth graders.

- [The Project was] very positive, [a] good resource, [and had] a helpful staff.

The second open-ended question asked participants for recommendations for change. With respect to changes in the service delivery system, the teachers said:

- I would like to visit other collaboratives to see how they set up their classrooms and carry out specific objectives.

- [I would like] possibly more contact with staff through additional workshops.

- [I was] very pleased with service delivery -- contact person was readily available and if schedule problems arose -- 'phone contacts were made. The ease of communication was greatly facilitated by the efforts/commitment of our individual contact person.

- [I would like to see] more frequent workshops for all four collaboratives together. Topics would be selected by teachers. [One] topic would be discussed at each meeting. Teachers would share techniques and problem-solve.

One director answered also. S/he suggested that we "schedule regular meetings with administrators of collaboratives" echoing the earlier theme of a need for more direct involvement of managers.

With respect to changes they would recommend if a similar grant were to be written in the future, the teachers made these suggestions:

- [You should] have more visits to individual classrooms, and work with teachers on an independent basis.

- [I would suggest] that intercollaborative visits happen on a regular basis through the Project's efforts and that several yearly meetings between collaboratives' teachers and staff be established to facilitate sharing of ideas/ approaches. [These meetings] may be centered on a topic (e.g., classroom delivery of therapeutic services, program model, incorporating philosophy with classroom program).

All three directors responded to this chance to provide input:

- The concept of the grant was wonderful. I would like to be involved in another venture with Tufts. The only suggestion I could make is to build in a mechanism to expand to other classes within the collaborative. Specifically I think the project we worked on with Project CoNECT was highly successful. Even though it was our responsibility to expand it to other classes, a little extra prod from the Project would have been helpful.

- [It would be better if there were] more time for consultant.

- Consultant [needs] to have more time. [There should be] more opportunities for administrators to exchange information [and] more inservices.

In summary, when asked whether they would recommend this service to others in the field, 75% of the teachers checked that they would "highly recommend" this program, and 25% indicated that they would "somewhat recommend" it. Each of the three directors would highly recommend this service.

Summary

Project CoNECT's significant contributions to the expertise of teachers and administrators in early childhood special education has been well

documented. All facets of the Project's inservice component were rated very highly by the consultees. Many specific changes in knowledge, strategies, techniques and skills were described by the evaluation respondents. The most frequently advanced suggestion for change in the project was simply to have more of it. Respondents spontaneously mentioned that they wanted more time with the consultants and wanted the consultants to be involved in more classes. They wanted more workshops, and they asked for inservice training and increased intercollaborative communication and exchange. In short, they wanted more of every one of the inservice components provided by Project CoNECT.

This evaluation makes apparent that teachers do progress and change as a result of interactions in cost-effective, inservice delivery systems such as Project CoNECT. A commitment must be made to provide special educators with ongoing access to information, resources, support and reinforcement.

Section III

Evaluation of Subcomponent I:

M.Ed. Preservice Training of Teachers of Young, Severely Handicapped Children

The Master of Education degree program, Subcomponent I of Project CoNECT, provided multidisciplinary training, with a strong background in child growth and development, to students preparing to teach young (3-7-year-old) severely handicapped children. Certified by the State in March, 1982, it leads to the Massachusetts teaching certificate, "Teacher of Young (3-7) Children with Special Needs." The program's primary goal was to give students a variety of didactic and practical experiences to develop their competence as educators of severely handicapped young children. In addition, students became knowledgeable in the techniques used by other members of the multidisciplinary team (speech/language pathologists, rehabilitation therapists, etc.) serving handicapped children and learned to communicate effectively with those professionals.

The goals of Subcomponent I met State and Federal priorities for the preparation of personnel to teach the handicapped. Specifically, the program (a) targeted early childhood, (b) targeted the severely handicapped, (c) was interdisciplinary, and (d) concerned general special education. Furthermore, its training priorities were those of the State CSPD: first, collaboration between institutions of higher education and educational agencies such as collaboratives; second, field-based special education training for personnel employed in specialized programs for young children with special needs; and third, training to broaden the competence of specialists who are employed in education agencies such as collaboratives (see Appendix A).

The M.Ed. program was designed to meet the needs of three groups of students: those students who had already successfully completed the regulalar undergraduate program in early childhood education at Tufts; those who had been trained, and perhaps employed, as elementary school teachers; and those who had had no prior teacher training. By the time they graduated, all of these students were prepared to work in diverse settings that serve young,

handicapped children: self-contained or mainstreamed classes in public schools under mandate to provide services; Headstart programs; State and private residential, institutional and school settings; home-based early intervention programs; and other more specialized programs such as research and demonstration projects within, for example, universities or departments of public health.

Under the auspices of Project CoNECT, we advertised our M.Ed./Young Child with Special Needs program in several mailings. Brochures went to colleges and universities in the United States that have undergraduate and graduate programs in special education, early childhood and psychology. Brochures also went to members of the Massachusetts Association for Occupational Therapy and the Massachusetts Speech, Language, and Hearing Association because of their work with young children with special needs. In addition, an announcement of the program was placed in the TASH (The Association for the Severely Handicapped) Newsletter.

Selection of M.Ed. Candidates

M. Ed. candidates for Project CoNECT were selected on the basis of standard criteria used by Tufts University. Prior academic achievement provided evidence of the candidate's ability to complete the course work with a grade of distinction (A or B). Three letters of recommendation had to be submitted, and the student provided a two-to-three-page statement of his or her reasons for pursuing graduate study. This statement was reviewed not only for content but also for writing skill. All material submitted by the applicants was reviewed by three faculty/staff members of the Department of Child Study. After each had examined the materials independently, a decision regarding acceptance, rejection or interviewing was made by the coordinator of the special education programs.

Advising

Once students were selected, individualized academic programs were developed for each depending on previous education, employment, career goals and personal interests. Each Master's student completed a ten-course sequence, including academic course work, field-based practica, and participation in multidisciplinary training projects. Students attended the program for at least two semesters and a summer, some extending their courses over a two-year period. A total of fifteen graduates were enrolled in the M.Ed. program. In addition, five undergraduate students participated in the Project.

Course Work

The competencies students were expected to achieve by the end of the Master's degree program are congruent with new Massachusetts regulations for the certificate, "Teacher of Young (3-7) Children with Special Needs" (see Appendix B). The objectives identified and the courses that addressed them follow below. Although the specific choice of courses varied somewhat depending upon students' professional needs, all students were required to demonstrate expertise in each general area.

A. OBJECTIVE: The student will be knowledgeable in the areas of developmental psychology, particularly the early childhood years.

ACTIVITIES: The choice of courses offered from which students could select were:

CS 161, Advanced Personal-Social Development

CS 163, Infancy

CS 151, Advanced Intellectual Development of Young Children

CS 251, Advanced Topics in Intellectual Development

B. OBJECTIVE: The student will be knowledgeable about the characteristics of developmental deviations and of the educational, social, emotional, cognitive impact of a special needs child on the family.

ACTIVITIES:

CS 190, Deviations in Development and Learning (formerly listed as CS 290)

CS 296, Seminar in Special Education

C. OBJECTIVE: The student will develop skill in observing, managing, and monitoring behavior of students and in designing developmentally appropriate techniques for managing behavior from groups and individuals.

ACTIVITIES:

CS 191, Emotional Problems in Young Children

CS 291, Seminar in Emotional Problems of Children

CS 298, Remedial Strategies for Special Needs Children (formerly addressed in CS 237, 238)

D. OBJECTIVE: The student will demonstrate skill in designing and implementing a variety of instructional programs for groups and individuals, adapting materials as necessary to meet the unique needs of each child.

ACTIVITIES:

CS 151, Advanced Intellectual Development of Young Children, and

CS 251, Advanced Topics in Intellectual Development

CS 298, Remedial Strategies for Special Needs Children (formerly addressed in CS 237, 238)

E. OBJECTIVE: The student will identify and adapt elements in the environment which will motivate and enhance learning.

ACTIVITIES:

CS 174, Physical Environment and Use of Space

CS 175, Planning Environmental Facilities for Children

F. OBJECTIVE: The student will be knowledgeable about theories of normal language acquisition and of the impact of language disorders on learning.

ACTIVITIES:

CS 152, Development of Thought and Language

CS 155, The Young Child's Development of Language (formerly addressed in CS 114)

CS 298, Remedial Strategies for Special Needs Children

CS 195, Language Associated Disorders in Children (formerly addressed in CS 114)

CS 261, Seminar in Personal-Social Development (formerly listed as CS 161)

G. OBJECTIVE: The student will be able to describe at least three models of early education and provide descriptions of the curricula used.

ACTIVITIES:

CS 270, Seminar in Early Education (formerly listed as CS 007)

H. OBJECTIVE: The student will develop skill in interacting with young, handicapped children in an equitable, sensitive, and responsive manner. The student will develop skills in evaluating his/her own role behavior and performance as a teacher of young, handicapped children.

ACTIVITIES:

CS 232, Internship (formerly listed as CS 237,238)

CS 233, 234, Supervised Generic Teacher Internship (formerly listed as CS 237, 238)

The student teaching practicum began after a student had taken a number of applied as well as theoretical courses. Students were placed in classrooms which served severely handicapped 3-to-7-year-olds. Preferential placement was given to classes in the collaboratives involved in this project. Students spent all their time in the practicum sites for one semester (14 weeks), working with children in the classroom (300 clock hours), making supervised home visits, carrying out home-based training for families and children, and attending multidisciplinary staff and inservice training conferences. Students were supervised on site every other week or approximately seven times during the semester. Student teachers also met on a weekly basis as an informal group to discuss common issues of professional and interpersonal matters.

I. OBJECTIVE: The student will be knowledgeable about State and Federal laws pertaining to special education.

ACTIVITIES:

CS 180, Law, Courts and Children

CS 183, The Rights of Children and the Child Advocate

J. OBJECTIVE: The student will identify community and governmental resources for providing direct and supportive services to handicapped, young children and their families.

ACTIVITIES:

CS 201, 202, Graduate Seminar

K. OBJECTIVE: The student will demonstrate the ability to communicate clearly, understandably and appropriately with young, handicapped children, with members of the children's families, and with members of the inter-disciplinary team which provides services for the children.

ACTIVITIES:

CS 232, Internship (formerly listed as CS 237, 238)

CS 233, 234, Supervised Generic Teacher Internship (formerly listed as CS 237, 238)

L. OBJECTIVE: The student will select appropriate techniques and instruments for evaluating young, handicapped children. The student will demonstrate skill in formally and informally evaluating young, handicapped children and in communicating the results of that evaluation to parents and multidisciplinary team members.

ACTIVITIES:

CS 222, Formal Assessment and Educational Planning for Special Needs Children (formerly listed as CS 122)

CS 225, Use of Projective Techniques with Children

M. OBJECTIVE: The student will demonstrate skill in developing an individualized educational program based on evaluation data and in reporting the progress to parents and team members.

ACTIVITIES:

CS 222, Formal Assessment and Educational Planning for Special Needs Children (formerly listed as CS 122)

CS 281, Consultation Strategies in Educational Settings

CS 235, Supervision

Many other courses in this department and others in the University were available to supplement this selection.

Evaluation: Twenty students were enrolled in the early childhood special education program during the three years of Project CoNECT. Thirteen received Master's degrees in Education, four received undergraduate degrees, and three are continuing their Master's studies. One important index of the effectiveness of preservice training is the job placement of its graduates. The Project has maintained contact with nineteen of its twenty students.

The only student enrolled for student teaching in the fall of 1981, Ms. B. A., obtained an M.Ed. and is now a head teacher in an integrated toddler-preschool program sponsored by the Massachusetts Protective Services Agency. All three of the spring, 1982 student teachers received M.Ed.'s. Ms. A. A. is currently teaching kindergarten in a private school. Ms. J. H. is teaching kindergarten in an international school located in the Boston area, and Ms. M. S. teaches in a self-contained classroom for children aged 6, 7, and 8 who have language disorders.

Two young women were enrolled in student teaching in the fall of 1982, and both received graduate special education degrees also. Ms. E. U. is a head teacher in the integrated preschool which had served as her internship site. Ms. G. R. is presently a kindergarten teacher.

The spring of 1983 found seven students engaged in student teaching. Four of these earned graduate degrees, and three received undergraduate degrees. Of the Master's-level teachers, Ms. D. B. head teaches in a language disorders preschool class; Ms. D. S. is the special needs coordinator at the Head Start program where she had done her internship, and

Ms. D. C. is both a head teacher in a toddler program and a Ph.D. candidate at Harvard University. The location of the fourth graduate student, Ms. C. C., is unknown. Two of the three undergraduates earned teaching positions in day care centers. One of these graduates is now returning to Tufts and plans to work toward a Master's degree in special needs. The third undergraduate is teaching in a public kindergarten/first grade class.

The fall of 1983 student teaching class consisted of three students who went on to earn graduate degrees. Ms. A. M. is a head teacher with special needs students aged six and seven. Ms. V. W. teaches emotionally disturbed five-, six- and seven-year-olds. Another student hired by her placement was Ms. J. S., who is currently an assistant teacher and will soon move to a head teaching role with young, special needs children. Three of the four students who student-taught in the spring of 1984 are still enrolled in their courses of study leading to a Master's degree. The fourth, an undergraduate, has been hired as an aide in her student-teaching placement.

The quality of the preservice training these students received is made explicit when one looks at the positions the graduates have attained. In order to acquire more specific information about the effectiveness of this training over time, we sent detailed questionnaires to the current supervisors of the four first-year graduates. The directions and criteria presented to the supervisors were as follows:

> The evaluation form organizes classroom performance into six major areas: 1) Understanding and Responding to Children's Behavior/Clarity of Communication with Children; 2) Curriculum Design/Instructional Skills; 3) Management and Group Control; 4) Communication with Adults; 5) Knowledge of Evaluative Procedures and Deviations in Development and Learning; 6) General. Within each category there are a number of specific competencies which require your evaluation. In addition, there is space for

you to elaborate on any of the criteria raised and to add additional information that strengthens understanding of your ranking. Please do not omit any of the sections labeled RELEVANT DISCUSSION. Use as much space as necessary in your discussion. Each of the itemized competencies requires that you circle the number and description which most closely approximates your feelings about the student's performance. In order to assist you in making a meaningful judgment, the following criteria are set forth:

(1) SERIOUS PROBLEMS Performance is inadequate and you have reservations about the student's potential in this area.

(2) LIMITED CAPACITY Performance is less than expected; a number of problems exist.

(3) ADEQUATE CAPACITY Performance is of average quality and is not untypical of how large numbers of students would perform.

(4) GOOD CAPACITY Performance is competent and reveals definite strength.

(5) SUPERIOR CAPACITY Performance is clearly in excess of what is typical and reveals distinction.

Three of the four supervisors returned their questionnaires. However, because the number of respondents is so small, caution must be exercised when making generalizations drawing conclusions from this data. These evaluations have provided some indications of the long-term effectiveness of the preservice training that the first-year students received. The collected data is reported and analyzed below by each of the six major performance areas.

I. UNDERSTANDING AND RESPONDING TO CHILDREN'S BEHAVIOR/CLARITY OF COMMUNICATION WITH CHILDREN

The student:

1. Engages in natural, spontaneous conversation with children; appears to gain satisfaction and pleasure from interacting with them.
   Mean = 4.67 Range = 4-5

2. Understands what is developmentally appropriate behavior for children of a given age (i.e., nature of play, interest spans, social relationships.)
   Mean = 4 Range = 0

3. Listens to, observes and responds to each child using language appropriate to the age, developmental stage, social, racial and linguistic background of the children.
   Mean = 4.33 Range = 4-5

4. Uses non-verbal communication appropriately and alternative communication systems as needed.
   Mean = 4 Range = 0

5. Demonstrates awareness of children's feelings and is able to identify a range of affective behaviors, such as: fear, jealousy, anger, joy, etc.
   Mean = 4 Range = 3-5

6. Interacts with children with sensitivity to the possible causes of behavior; exercises an understanding of individuality.
   Mean = 3.67 Range = 3-4

7. Helps children behave in socially acceptable ways (uses praise for positive behavior; gives the child a choice when possible; avoids unnecessary constraints).
   Mean = 4.33 Range = 4-5

8. Practices positive methods of enhancing a child's self-esteem (respects children's decisions; helps children to experience success; rewards children with praise).
   Mean = 4.33 Range = 4-5

9. Actively seeks to understand and implement change in her own behavior as it affects working with children (issues of authority, anger, competition, insecurity, etc.).
   Mean = 4 on N of 2 Range = 0

Seven of the nine responses regarding the students' abilities to communicate indicate that these teachers had acquired a good or excellent capacity in this area. The two "adequate" responses seem to address the idiosyncratic traits of a particular teacher rather than a lack in program preparation.

II. CURRICULUM DESIGN/INSTRUCTIONAL SKILLS

1. Takes initiative in bringing in lessons and activities that reflect thought and concern for the program.
   Mean = 4.67 Range = 4-5

2. Plans activities with an understanding of what stimulates and engages children's interest; is sensitive to children's conversation, play etc.
   Mean = 4 Range = 0

3. Understands the specific skills and concepts that are developmentally relevant for individuals and small groups and integrates these into planning and instruction.
   Mean = 4 Range = 0

4. Develops and implements educational programs (I.E.P.) appropriate for each child.
   Mean = 4.33 Range = 4-5

5. Systematically uses data from observation and assessment in designing, monitoring, and implementing curriculum.
   Mean = 5 on N of 1 Range = 0

6. Gives clear and concise directions and explanations to children.
   Mean = 4 Range = 3-5

7. Stimulates and engages interest when leading instructional groups; skills in questioning, explaining, focusing attention, etc.
   Mean = 4.33 Range = 4-5

8. Designs, draws upon and adapts a wide assortment of materials, equipment, and resources that are appropriate for the special needs of each child.
   Mean = 4 Range = 0

9. Demonstrates capacity for building isolated activities into more elaborated integrated curriculum; employs interdisciplinary teaching.
   Mean = 4 on N of 2 Range = 0

10. Reveals originality, creativity, and resourcefulness in planning and working with children.
    Mean = 4 Range = 0

11. Identifies and adapts environmental elements in the classroom which will enhance learning, minimize distraction and take into consideration the special physical, emotional and cognitive needs of each child.
    Mean = 4.33 Range = 4-5

The program appears to have succeeded in teaching these professionals how to plan and implement appropriate activities, a significant aspect of any successful teacher.

III. MANAGEMENT AND GROUP CONTROL

1. Confronts aggressive deviant behavior.
   Mean = 3.67 Range = 3-4

2. Handles situations which require limit-setting (anticipates problems brewing; knows when to intervene; acts fairly; follows through).
   Mean = 4.33 Range = 3-5

3. Evidences a range of appropriate techniques in controlling behavior as opposed to only one or two.
   Mean = 3.67 Range = 3-4

4. Makes decisions about management and control with respect for the wide assortment of behaviors in a group (i.e., shyness, insecurity, aggression, individuality, etc.).
   Mean = 4 Range = 3-5

5. Demonstrates skill in leading a group time; sensitivity to such issues as timing, sequence, pacing of activity, use of voice etc.
   Mean = 4.33 Range = 3-5

6. Orchestrates transitions and the movement of groups from one location or activity to another.
   Mean = 4.33 Range = 4-5

The teachers demonstrated a sensitive and skillful approach to group management and discipline. Given the positive responses, one might infer that the student teaching and course work in which the students were involved at Tufts may have contributed to development of the foundations of these skills.

IV. COMMUNICATION WITH ADULTS

1. Sustains a positive working relationship with cooperating teacher and interacts productively with you.
   Mean = 4.67 Range = 4-5

2. Relates positively to other adults in the school environment.
   Mean = 4.67 Range = 4-5

3. Facilitates the sharing of constructive criticism by you or supervisor.
   Mean = 4.67 Range = 4-5

4. Takes action on behalf of recommendations.
   Mean = 4.67 Range = 4-5

5. Provides you with appropriate feedback and initiates discussion about matters of disagreement or concern; honesty in discussion.
   Mean = 4.33 Range = 4-5

6. Actively seeks to understand and improve her behavior with adults.
   Mean = 4.67 Range = 4-5

7. Accepts and fulfills a fair share of responsibilities (contact with parents; care of materials; meeting time schedules).
   Mean = 5 Range = 0

8. Consults with other school personnel, other professionals, and parents concerning specific techniques for motivation.
   Mean = 4.67 Range = 4-5

9. Communicates with other professionals regarding a child's evaluation, program and progress.
   Mean = 5 Range = 0

10. Establishes and maintains sensitive and effective communication with parents or guardians about their children.
    Mean = 4.67 Range = 4-5

The professional manner with which these teachers interacted with colleagues, supervisors, and staff is very clearly demonstrated by the responses recorded in this section. This reinforces the selection process and training to which the chosen students were exposed while at Tufts. These students demonstrated maturity, security and skill in their adult interactions.

V. KNOWLEDGE OF EVALUATIVE PROCEDURES AND DEVIATIONS IN DEVELOPMENT AND LEARNING

(All the means in this section are based on two respondents, since one supervisor indicated that one teacher had not yet had these opportunities.)

1. Systematically observes and records child behavior and the child's interactions with others (adults and peers).
   Mean = 4 Range = 0

2. Is able to analyze and identify developmental delays and disorders in young children (social, emotional, cognitive, speech and language, perceptual and motor areas).
   Mean = 3.5 Range = 4-5

3. Uses and interprets evaluative procedures appropriate to the age, developmental stage, racial and linguistic background and ability of children.
   Mean = 3.5 Range = 3-4

4. Monitors progress by checking individual children's mastery of specified educational, developmental and behavioral objectives.
   Mean = 4 Range = 0

5. Writes accurate assessment and progress reports of a child's development in cognitive, language, speech, perceptual, motor and personal/social areas.
   Mean = 4.5 Range = 4-5

6. Is knowledgeable about Federal and State legislation related to young children with special needs.
   Mean = 3.67 Range = 3-4

Although the scores in this section are adequate or above, it appears that these are somewhat lower than those reported in previous sections. It might be worthwhile to review the evaluation courses and experiences provided to these first-year students in order to determine how to develop further the evaluation skills of new teachers.

VI. In brief, what have been the major strengths and weaknesses? Please make any additional comments which you feel are pertinent. Thank you.

A. B. A. is an excellent teacher with an intuitive sense about children and their needs. She is able to identify a problem with a child, and then takes whatever steps are necessary to get help. She has a good rapport with parents, as well as staff. It has been more than a pleasure to work with B. A.

B. It is a pleasure to have A. in our school. I find her most cooperative and positively involved.

C. Thus far, M. S. has done a commendable job with a young class of children with language disabilities. A number of children also have behavioral problems, and M. has been handling individual problems satisfactorily. She has mobilized other staff in the school to provide appropriate support for herself and her students. Group management skills need development, but there has been progress in this area already as seen in her children's increasing awareness of each other and their ability to share and play together. M. is learning to "hang in there" when problems develop with specific children and not to give up too soon. She has reached out to parents and encouraged communication and support for her program in a very positive manner.

Summary

The information about the program's graduates indicates a successful search for appropriate, degree-related, professional employment by all nineteen of the students whose positions are known to the Project staff. The training program has produced head teachers in public and private preschools and elementary schools serving normally developing and special-needs students.

Already some of the program's graduates have progressed to positions as coordinators or have sought more advanced degrees. None of the students accepted to the program failed to complete the degree requirements. These results reflect positively on the quality of the preservice training provided by Project CoNECT's faculty and staff.

In addition, the results obtained from the very specific questionnaires completed by the first-year graduates' supervisors are illustrative of the high quality of performance of the graduates. Skills in planning, communicating with, managing, and disciplining classes of young children were clearly demonstrated. Some review of the training in evaluation strategies that these first-year students received might be warranted based upon the findings. The comments of the supervisors indicated the high regard in which they hold these teachers and reflects positively on the teacher preparation which they received at Tufts under the auspices of Project CoNECT.

Section IV

Evaluation of Subcomponent II: Inservice Training in the Special Education Collaboratives

The primary goals of Subcomponent II, "Inservice Training in the Special Education Collaboratives," were the following:

To provide, coordinate and integrate professional development consultation and training for the professional and paraprofessional staffs of four special education collaboratives as specified in individualized plans. Foci for such training included increasing knowledge and skills in the following areas:

- Cognitive and socio-emotional development as a framework for understanding children as learners
- Formal and informal assessment in a developmental framework and in the service of defining learning styles and establishing learning environments for young children with severe special needs
- Curricular modification conducive to remediation of or compensation for special needs and optimizing learning potential
- Classroom and behavior-management strategies
- Consultation and communication skills to enhance the quality of collaboration among professional and paraprofessionals servicing a child and between school staff and parents

Evaluation data specific to each of the four collaboratives are presented below, documenting specific objectives and activities.

1. EdCo Collaborative

A. OBJECTIVE: To provide monthly consultation during the 1981-82 school year to two classroom teachers of severely handicapped children regarding material adaptation, curriculum development and teaching strategies.

ACTIVITIES: Fifteen consultation visits were made from December, 1981 through May, 1982. Each visit lasted from 8:30 a.m. to 2 p.m. with time split between the two teachers. Consultation was given on assessment and diagnosis, the use of alternative communication systems, positioning and managing physically handicapped children in a preschool setting, and behavior management. Observation, verbal feedback and resource books and information were provided to both teachers. A one-hour video tape was also made and used to analyze teacher's effectiveness and observe in detail children's behaviors.

Evaluation. In the spring of 1982, one of the two teachers who received on-going consultation returned a written evaluation which follows. Both teachers were very enthusiastic about the Project's involvement, and both requested further contact for the next school year.

- Please describe the role or contributions of the Project CoNECT consultant in your program.

  The Project CoNECT consultant has provided me and my staff with much useful information concerning a child with severe physical problems. She was very helpful in teaching us correct positioning and handling procedures. We also appreciated her help with behavior management.

- Describe the most useful interaction you've had with the Project CoNECT consultant. (Specific examples or general functions).

  A combination of functions the consultant performed were very useful. She spent time working with the child and modeling correct techniques, as well as meeting/discussing the child with classroom staff. Sharing of reading material was also very helpful.

- Describe the least useful interaction you've had with the Project CoNECT consultant. (Specific examples or general functions).

  No response.

B. OBJECTIVE: To provide monthly consultation to one classroom (reduced from two classes last year because of budget cuts) throughout the 1982-83 school year. The topics will be determined during pre-observation conferences as specified by the needs of the teachers.

ACTIVITIES: Ten, day-long visits were made. The visits consisted of observations, conferences and model teaching sessions. Subjects addressed included fostering active responding and thinking, increasing student independence, identifying and responding to individual learning styles, questioning strategies, and staff self-evaluation.

Evaluation: In May of 1983, the teacher and the aide who received this consultation provided written feedback as follows:

- Please describe the role or contributions of the Project CoNECT consultant in your program.

  Teacher: The Project CoNECT consultant offered specific suggestions for meeting the needs of two high-functioning students in my classroom for multi-handicapped children. She observed particular students and offered insight on their learning styles which led to programmatic changes. She observed teacher in the classroom and gave us feedback on teaching techniques, styles, and arrangement of the environment. She served as a resource person providing me with information on workshops and various publications.

  Aide: The consultant discussed our students with us, videotaped some sessions, brought in information that was useful for us and had meetings with us.

- Describe the most useful interaction you've had with the Project CoNECT consultant. (Specific examples or general functions).

  Teacher: All of the above. It has been extremely helpful to have this consultant.

  Aide: The meetings we had with the consultant after she observed our individual sessions were very helpful.

- Describe the least useful interaction you've had with the Project CoNECT consultant. (Specific examples or general functions).

  Teacher: Generally, administrators can offer little constructive feedback or information to the teaching staff of a severe/multihandicapped classroom. The Project CoNECT consultant has filled this vital role. All interactions have been useful.

  Aide: No response.

- How would you improve the role or functions of the Project CoNECT Consultant?

Teacher: I wish she had more time to give us! Also facilitating more interaction between the collaboratives. (See below.)

Aide: More visits, if time permitted.

- How would you improve other aspects of the Project CoNECT-Collaborative partnership?

Teacher: I would like to see more sharing of information between the teachers of the collaboratives. More frequent workshops could be held around various topics, with the majority of time being spent discussing the ways different classrooms implement different programs. Valuable input could also be provided by the consultants. Various topics could include: non-vocal communication, active stimulation program, data collection, assessment process, main-streaming/integration.

Aide: No response.

C. OBJECTIVE: To provide monthly consultation to two classroom teachers throughout the 1983-84 school year. The topics will be determined during pre-observation conferences as specified by the needs of the teacher.

ACTIVITIES: Several meetings occurred with the Program Director to plan for the consultations and to provide updates during the year. Nine, day-long visits were made to one teacher. These visits included planning for the use of a computer in the rehabilitation of a student, assisting the teacher in professional development activities, collaborating with the teacher in the development of a parent workshop. (Figure 1 provides a consultation report as an example of a typical consultation process.)

Insert Figure 1 about here.

The consultant also observed individual children for specific purposes. For instance she provided diagnostic information and recommendations for specific program elements, e. g. the effectiveness of the Co-Active Movement program. She provided observation data, analyses, recommendations, and resources on each of these topics. In addition, visits were made to instruct the classroom staff about a comprehensive data-keeping system used at the

Figure 1

CONSULTATION REPORT FORM: PLANNING

Collaborative .....EdCo

Date of Consultation.....10/19/83

Collaborative Teacher.....L.

Consultant.....K.D.

Purpose of Consultation.....Meeting to discuss ways in which a computer program might be developed for one child.

Description:

We met from 2-3:30 p.m. I raised several preliminary questions and issues.

1. What would the purpose of a computer program be for this child?

   A - Computer-Aided Instruction
   B - Computer Literacy
   C - Remediation of Specific Problem Areas
   D - Leisure Skills

Each of these goals might require different materials and types of computer interaction.

2. What access to computer use might be presently available? Through the school? Is there a long-range plan for the purchase of a computer by the school system or the parents?

3. Can the child for whom this is intended use a keyboard? (L. had already borrowed some old typewriters to determine this and develop skills in this regard.)

4. What software is already available in the school that might be appropriate for this child?

5. What financial resources will be available if software needs to be purchased or developed?

I mentioned two possible resources. The North Shore Children's Hospital is developing a Computer Resource Center. I gave L. the name of a doctoral student who is assisting with this -- to explore time lines, etc. for making use of this service.

I also mentioned the Instructional Technology Resource Center at the Department of Education's regional Center as a source of information on Consultants and Materials.

We ended by planning to meet again on November 16, by which time L. will have explored some of these areas. I will bring software catalogs and some resource material for her at that time.

Mailman Institute in Florida.

A second teacher received seven visits during the 1983-84 school year. These observation-conference sessions focused upon two children, one very aggressive and one very withdrawn. Suggestions and resources were provided during each conference following an observation period of several hours. An example of this type of consultation report is included as Figure 2.

Insert Figure 2 about here.

Evaluation: The end-of-year evaluation was restricted to a final evaluation of the Project. Information about the effectiveness of consultation to this particular collaborative cannot be ascertained because the evaluations were completely anonymous. One can refer to the Final Evaluation (Section II, pp. 7-17) which highly praises the quality and quantity of the individualized consultation provided to educators.

Figure 2

CONSULTATION REPORT FORM: OBSERVATION

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

Collaborative: EdCo

Collaborative Teacher: J

Date of Consultation: 9/30/83

Consultant: K.

Purpose of Consultation: to provide suggestions to classroom staff on managing the disruptive behavior of a child who recently entered the classroom.

OBSERVATION

The child was observed from 9 a.m. - 10:30. The following were noted.

At table:

1. Child tried to spill paste. It was taken away quickly, and a puzzle was given to him -- also quickly. He dumped that on floor immediately. He later showed some good puzzle skills. Therefore he knew the appropriate use. Spilling/dumping gets him the results he wants -- i.e. task avoidance, communication, possible attention. (I'm not as convinced of this last motive.)

2. Child is echolalic and very good at it. How much speech does he really understand? With or without gestures? In long sentences or short phrases?

3. Child looked at me -- was "confused?" "anxious" -- then threw puzzle again. Why?

4. Child spontaneously traced the outline of the puzzle form, carefully, methodically. It was a good strategy for him. He was looking for tactile input. Why?

5. After he completed the puzzle successfully and appropriately, you correctly signalled to M. (assistant) to take it away and end on a positive note. This should have been accompanied by a dramatic "Good boy," "All done," so it wasn't seen by him as a punishment.

6. M. asked him -- while he was exploring the puzzle -- "Can you find the circle?" While he certainly has surprising

Medford, Massachusetts 02155
617 628-5000

skills, I would avoid this type of request unless you know he can do it and probably wants to.

At circle:

(Sorry I interfered!)

7. You asked child to find a rug. This may be too much for him. He should have a specific rug in a specific place with a specific adult if he is introduced to circle.

8. Holding him is a problem. My experience with children like this is that if you are holding him, trying to contain him, then you must hold/contain very completely. e.g. Holding his upper body while he kicks his feet and waves his arms is probably counter-productive and frightening. He really needs to learn to be held and be given this type of physical assist.

9. He has learned that throwing, crying, screaming get him what he wants. You will need to be careful not to reinforce this in school.

10. After tantrum he was put in his chair at the table and calmed down immediately, waiting for snack. It was very reinforcing.

At sand table:

11. He realized he saw an orange juice container -- very interesting. I'm not sure he could put it into a total perspective -- e.g. could he realize when he was digging that he was using the juice container, or was he only aware of this when looking at the label? I don't know and don't question "cognitive" ability -- but his ability to process and integrate information as we do.

12. Another boy ran, making excited sounds, to the climbing gym. Child imitated the sounds and action perfectly.

13. Motor coordination is great. Child seems to have reasonable eye-hand coordination.

14. He showed most response to language with J. (head teacher) when calling to "Come here" to have his shoe tied. "Come here" games seemed to be good for him.

INITIAL RECOMMENDATIONS

1. Develop a theoretical approach and understanding of "autistic-like" children with classroom staff.

2. Start systematically assessing child's receptive language skills.

Figure 2, page 3

3. Until you know for sure, assume he can only process clear, uncluttered familiar phrases. Make a list you will all use.

4. Emphasize the positive, by dramatic verbal and tactile reenforcement.

5. Give him clear warning about all transitions, particularly when the change is one he will not welcome. This goes for activity changes as well as changes in materials within an activity. Use a phrase like "All done" before (or at least while) removing material or ending an activity.

6. For the present, teaching him to comply with request is important.

   A. Play games for which he receives rewards for complying with requests.

   B. If you make a request, be sure he is able to comply with it voluntarily or be prepared to force it. (There may be a few exceptions to this, but as a general rule it is important.

7. When working with child, never give him any material until a teacher is in a position to control it if necessary. e.g. Don't give him a puzzle and then turn away to put a previous material away.

8. I don't think he misbehaves for attention specifically. At any rate, his behavior is such that ignoring is not a technique that will work with him.

9. Try to teach him, in a less threatening time, to enjoy sitting on adult's lap. Try rocking with him, doing it while playing with a favorite toy etc. This might be what one teacher can do in another part of the room during circle time.

10. If circle is too much for only two teachers, would you consider shortening it for a while, until this child has more time to adjust.

Three resources which might be helpful are:

1. Wood, M. Developmental Therapy Curriculum Guide. Baltimore: University Park Press.

2. Lovass, The Me Book, Baltimore: University Park Press. 1981.

3. "Pre-Language Curriculum," Washing: Galludet Press, date unknown. Based on techniques of Co-Active Movement development of interpersonal relationships, language and symbolic thought.

(Note: I will be able to lend you the first two references. L. recently ordered the third. Perhaps you might borrow it from her.

2. The Shore Collaborative

A. OBJECTIVE: To develop five workshops during 1981-82 school year based upon Shore Collaborative's staff's expressed needs and interests in pre-academic curriculum.

ACTIVITIES: Five workshops during the Basic-Skills meeting were conducted on the following topics: Behavior Management, Fine Motor Development and Its Relationship to Cognitive Growth, Active Stimulation Programming, The Use and Adaptation of Commercially Made Toys with Multiply Handicapped Children, and a hands-one workshop to design a simple FLAP switch. Copies of some handouts are provided in Figure 3.

Insert Figure 3 about here.

Evaluation: An average of eight staff members attended each monthly workshop. Both mid-year and year-end evaluations from participating teachers were very positive. On a scale of 1 (unhelpful) to 5 (very helpful) the workshops were given an overall mean rating of 4.9 (mid-year) and 4.9 (end year). Six out of seven teachers felt that the workshops resulted in changes in their classroom and/or teaching style.

B. OBJECTIVE: To consult with program administrator/staff during 1981-82 school year on matters pertaining to staff morale, classroom organization and management, assessment and curriculum, and specific instructional techniques, particularly in relation to the development of language, cognitive skills and active responding.

ACTIVITIES: Fifteen hours of direct in-classroom consultation were provided to two teachers of young, severely and multiply handicapped children at the Lindemann Center program. This consultation focuses on issues of classroom organization and scheduling and on suggestions for effective teaching

(Text continues, following Figure 3, on page 51.)

Figure 3

WORKSHOP HANDOUTS

Shore Basic Skills Training Series

Session 2

November 24, 1981

Suggested Curriculum Guides for Use with Severely and Multiply Handicapped Children.

NAME: Guide to Early Developmental Training

AUTHOR: WABASH Center for the Mentally Retarded, Inc.

ORDERING INFORMATION: Allyn & Bacon, Inc.
Longwood Division, Link Drive
Rockleigh, N. J. 07647

PRICE: $21.95

CONTENTS: Includes good developmental checklist for each skill area, including separate sections for sensory process training, with suggested teaching activities for each goal in checklist. Some suggestions are made for adapting teaching strategies to physically and sensorily handicapped children.

NAME: Programmed Environments Curriculum

AUTHOR: James W. Tawney et al

ORDERING INFORMATION: Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Box 508
Columbus, Ohio 43216

PRICE: $29.95

CONTENTS: Skills for developmental levels 0 - 3 includes assessment, teaching, and evaluation information for skills in language, cognitive, motor and self-help skills.

NAME: The Adaptive Behavior Curriculum: 3500 Prescriptive Behavior Analyses for Moderately, Severely, Profoundly Handicapped Students

AUTHOR: Dorothy Popvich and Sandra L. Laham

ORDERING INFORMATION: Paul H. Brookes, Publishers
P. O. Box 10624
Baltimore, Maryland 21204

PRICE: $13.95

CONTENTS: As title suggests.

NAME: Helping the Mentally Retarded Acquire Play Skills: A Behavioral Approach

AUTHOR: Paul Wehman

ORDERING INFORMATION: Charles C. Thomas, Publisher
301-327 East Lawrence Ave.
Springfield, Ill. 62717

PRICE: $12.50

COMMENT: As title suggests, Paul Wehman is a specialist in education of the severely handicapped.

NAME: A Prescriptive Behavioral Checklist for the Severely and Profoundly Retarded, Vol. I, II and III

AUTHOR: Dorothy Popovich

ORDERING INFORMATION: University Park Press
300 North Charles
Baltimore, MD 21201

PRICE: Vol. I - $17.95
Vol. II - $19.95
Vol. III - $19.95

NAME: Teaching Eating and Toileting Skills to the Multihandicapped in the School Setting

AUTHOR: Demos Gallender

ORDERING INFORMATION: Charles C. Thomas, Publisher
301-327 East Lawrence Ave.
Springfield, Ill. 62717

PRICE: $19.95

COMMENTS: Practical background information on physical handicaps and their affect on eating and toileting skills, useful, clear remediation strategies for use in classroom settings

NAME: A Sequential Curriculum for the Severely and Profoundly Mentally Retarded/Multi-Handicapped

AUTHOR: Ellen M. Kissinger

ORDERING INFORMATION: Charles C. Thomas, Publisher
301-327 East Lawrence Ave.
Springfield, Ill. 62717

PRICE: $29.50

COMMENT: Just published

NAME: Koontz Child Developmental Program: Training Activities for the First 48 Months

AUTHOR: Charles W. Koontz

ORDERING INFORMATION: Western Psychological Services
Publishers and Distributors
12031 Wilshire Boulevard
Los Angeles, CA 90025

PRICE:

COMMENT: General developmental assessment tool in 4 areas of skill acquisition: gross motor, fine motor, social, and language development. Suggests simple training activities for each goal. It is not highly structured or specific but it's strength lies in the simplicity and practicality of the training activities. Excellent suggestions for parents.

NAME: A Language Intervention Program for Developmentally Young Children

AUTHOR: Mailman Center for Child Development
University of Miami

ORDERING INFORMATION: P.O. Box 52006
Biscayne Annex
Miami, Florida 33752

PRICE:

COMMENT: Combines developmental theory with behavioral teaching strategies into a curriculum with applications to many types of handicapped childrens. Focus is verbal language.

Commercially Available Toys Useful in Encouraging Intentional Activity in Multiply Handicapped Children

Note: Age appropriateness should be a consideration in selection of any toy.

1. Toys Which Can Be Activiated With Little Or No Modification

Toy	Description	Modifications	Maker	Approx. Price
"Baby Toys"	ring pull toys designed for sequential early concept development	may need to adapt ring for easier grasp	Fisher Form	$13 for rod $7-15 pr. attachment
"Chatter Chum"	ring pull toy "talks"	may need to adapt ring for easier grasp	Mattell	$5-7
"Peek-A-Boo" Clown	ring pull toy "talks"	may need to adapt ring for easier grasp	Gabriel	$7
"Music Pet"	Strawberry ring pull toy that plays music	may need to adapt ring for easier grasp	Prince	$7
"Play Path Series"	red rings tracking tube peek-a-boo ball clear rattle	may need to attach loops for easier grasp	Johnson & Johnson	$3-7

Toy	Description	Modification	Maker	Approx. Price
"Busy Pot"	rattle with push buttons and ring attached at end for tying in place or easy grasp		Gabriel	$4
"Happy Apple"	slight tilt makes apple chime		Fisher-Price	$6-9
"Musical Roly Poly"	as above - needs slightly less tilt to activate		Baby Gee	$6
"Big Bird Chime Mirror"	big bird with mirror on stomach - slight tilt makes it chime		Gabriel	$5
"Rock and Roll"	ball inside ball rolls with tilt		Constructive Playthings	$7
"Spin and Tumble Balls"	large, clear plastic balls with colorful float inside		several makers	$6-9
"Brio Line"	pull toys which move in all directions	adapt with loop or arm tube at end of string	Brio	$12-30
"Snail Roller"	large, colored balls inside clear plastic tubing making up snails		Kusan Kusan	$7

Toy	Description	Modifications	Maker	Approx. Price
"Snail Roller" (cont.)	back - rolling or tilting snail causes balls to move			
"Roll and See"	blow-up bolster with clear plastic window through which child can watch balls roll		Geoffrey Family	$4
"Pound-a-Round"	pushing down on large pumping stick makes top spin	construct non-skid surface	Gabriel	$3
"Tap and Toot"	musical pounding bench		Gabriel	
"Busy Action"	5 different knobs and levers make different things in play pound move	only for children with some motor control	Playtime	$13
Sesame Street "Magic Catch Mitts"	hand puppet mitt with velcro covered balls		Sesame Street	
Slinky		attach loops to each end and slip over both hands	several makers	$2-3
Counting Frame	several rows of colored sliding beads		Gabriel	

Toy	Description	Modifications	Maker	Approx. Price
Cheerleader "Pom-Pom"		attach loop and slip over hand - arm - leg	several makers	
Colored plastic glasses	sunglasses or construct from clear colored sheets		teacher made	

II. Musical Instruments

Toy	Description	Modifications	Maker	Approx. Price
Electronic toy piano	various sizes, shapes		several makers	various
"Soft Sounds"	squeeze toy in shape of piano that plays 8 notes	may be folded in half and put under head, arm, leg etc.	Kenner	$9
"Magical Musical Thing"	long-necked, battery operated instrument that plays organ-like notes at the SLIGHTEST touch	works great with head sticks	Mattle	$15
Rhythm instruments		adapt for grasp with loops - sponge curlers etc.		

III. Battery Operated Toys That May Need a Switch Adaptation or Interface for Child's Use

Toy	Description	Maker	Approx. Price
Talking Robots	various sizes and styles	various	various
"Simon"	touch activates sequence of colored flashing lights		
"Electronic Name Tune"	plays first 10 notes of 30 tunes or can be programmed for others	Castle	$16
"Touch and Tell"	toy will name picture that child touches - various overlays	Texas Instruments	$50
"Pop Rock AMP"	strobe lights on speaker are activated by a switch and pulsate with "mike"	Carvinal Toys	$19
"Chirper Chick"	bird, suspended on spring, chirps when switch is turned on	Prince Toys	
"Dyno Mike"	wireless radio microphone that lets you transmit your own voice through any AM radio		
"Tyneyville Choo-Choo"	drop in record disk train and plays while it rolls -- it has an on/off switch		
"Space Spinner"	Slightest tilt makes flying saucer spin, vibrate, and hum	Playskool	$7
Deep Heat Massage Pad	gives off gentle heat and vibrating massage with low hum	Sears	

There is obviously a great variety of electronic toys, appliances, and entertainment equipment for all ages. The above list is only a small listing of some frequently used items.

strategies and materials.

Evaluation: At the year-end meeting with program staff, both of the teachers at the Lindemann Center receiving individualized consultation reported positively on this type of consultation. They both requested continuation for the next year, if possible, and recommended it highly to other program staff.

C. OBJECTIVE: To assist the program administrator and the staff in developing classroom schedules for the 1982-83 school year in order to make maximum use of program resources to meet individual educational goals.

ACTIVITIES: Two planning sessions with the program administrator and five two-hour workshops with the staff at the beginning of the 1982-83 school year focused upon style and techniques of scheduling and staff assignments. Seven observation and consultation sessions of approximately three hours each were held throughout the school year to provide individualized feedback and information to three teams. A number of books and journal articles relevant to these discussions were lent to the staff during the year. Resource materials were lent to Shore Collaborative during the 1982-83 school year. A list from which these materials were chosen is included in Appendix C.

Evaluation: Three meetings with the program director and one with the collaborative director, program director and staff occurred during the last months of the 1982-83 school year. The participants evaluated the effectiveness of the staff and schedule arrangements which had been tried that year. Reference to last year's scheduling must precede an evaluation of this year. During the school year, September, 1981 to June, 1982, the Multiply Handicapped Program at the Lindemann Center included six classes, three of which were headed by special education teachers and three of which were headed by occupational therapists. Physical therapy and speech and language therapy were provided to all six classes on an ancillary basis.

Occupational therapy was provided to the three classes headed by special educators on an ancillary basis.

The program supervisor felt that more educational input was needed, particularly in the three classes headed by occupational therapists. Project CoNECT had contracted, during the first year, to provide monthly, one-hour inservice workshops to the staff on issues related to educational goals and techniques for the severely/profoundly multiply handicapped. These were moderately successful, but the amount of staff training time was still minimal. Therefore, in September of the second year, the Collaborative developed a team-teaching model in an effort to meet budget pressures and still provide both educational and therapeutic input to all classes. Three teams, each consisting of one special educator and one occupational therapist, were created. Each team was responsible for providing services to two classes. The ancillary occupational therapy position was eliminated.

Project CoNECT was asked to assist in the implementation of this model, through direct consultation with the program supervisor and through another series of monthly training sessions. After an intensive year-long effort, the staff suggested that the model was not satisfactory and expressed their feeling that occupational therapy services could best be provided on an ancillary basis as part of a multi-disciplinary team that included a special educator heading each classroom. This model was adopted for the 1983-84 school year.

Five staff members completed the following evaluations in May, 1983. Their responses indicate that individualized consultation and on-site workshops specifically tailored to the needs of the staff are very well received.

1. Please describe the role or contributions of the Project CoNECT consultant in your program.

    a. Provided inservice on assessments, curriculum areas & act. stimulation. Acted as a consultant on new model, co-teaching. Provided written reports.

    b. Consultation provided an implementation of multidisciplinary

team approach and on development of educational goals for students.

c. Consultation to administration and staff in the development of an interdisciplinary team approach. Educational consultation for classrooms headed by OTR.

d. Advisory capacity -- offered new ideas/materials to begin a team teaching approach at this agency.

e. It helped to discuss the positive and negative experiences of team teaching, discuss strategies for scheduling, review resources available -- i.e. centers, books. It was also helpful to have consultant observe the classrooms and provide feedback on the needs of the children.

2. Describe the most useful interaction you've had with the Project CoNECT consultant (specific examples or general functions).

a. Working together on team model and active stimulation. Review of consultation report.

b. All interactions were useful. The "most" useful interaction was the review of the consultation report regarding educational goals.

c. Individual discussions related to the implementation of education programs for my students.
Input on "how to consult" to other staff/classrooms.

d. Most useful were the meetings on setting up team schedules and final analysis of outcome as an observer.

e. I appreciated consultant's ideas on activities and scheduling that could be carried out in the classroom. She met with L. and me on an individual basis. Discusses, for example, focusing on material children use every day, choosing a theme and varying materials during a month period.

3. Describe the least useful interaction you've had with the Project CoNECT consultant (specific examples or general functions).

a. Always found her helpful.

b. The least useful interaction was probably the initial interaction, when we began working on scheduling team switches. This is mainly because I was nc' yet prepared to work out a schedule.

c. (No response.)

d. Honestly, there weren't any. All of the information sharing was very useful.

e. Would have been more helpful to have you observe the educational programs when teachers was in D's room.

4. How would you improve the role or functions of the Project CoNECT consultants?

   a. May utilize consultant for more feedback on special needs in classrooms.

   b. Could have used more direct consultation time. The consultant needed to be on site more frequently in order to keep in touch with the progress/problems of the new team approach.

   c. Have consultant visit classroom more often and provide specific recommendations for improved educational structuring/environment/data collection.

   d. Only one suggestion -- more meetings (2 a month) instead of one.

   e. Have her visit the classrooms on a monthly basis, and observe whatever the teacher or therapist feels they need input on.

5. How would you improve other aspects of the Project CoNECT-Collaborative partnership?

   a. Include a meeting of coordinators from other programs. Involve student teachers in placements.

   b. No response.

   c. No response.

   d. Same as #4.

   e. No response.

6. Any additional remarks?

   a. I have enjoyed our relationship with Tufts. The Medical Institute also seems to be helpful.

   b. Consultation provided was very useful. Ideas and suggestions were excellent. Could have used more consultation time!

   c. The consultant was extremely helpful and made a great difference in helping me set up my classroom and work as a team member. I heartily endorse the continuation of this project.

   d. No response.

   e. No response.

D. OBJECTIVE: To consult with the newly developed Shore classroom for autistic children in a Malden, Massachusetts, public school on matters pertaining to staff and program development during the 1982-83 school year.

ACTIVITIES: Monthly, two-hour observation and consultation visits to the autistic class were made by the Project Director. The consultation focused upon a) morale and collegial relationships and b) individualized educational planning for one student involved in a complex diagnostic and bureaucratic appeal process.

Evaluation. The consultation was well received, according to informal staff and supervisory report.

E. OBJECTIVE: To provide information on curriculum resources appropriate to severely/multiply handicapped programs during the 1983-84 school year.

ACTIVITIES: Two meetings were held with the new program coordinator with discussions centering upon curricular approaches. One two-hour workshop was provided to staff on co-active movement. One teacher visited the curriculum laboratory at the Eliot-Pearson Department and had the opportunity to investigate and discuss a wide variety of resource materials.

Evaluation: On March 28, 1984, ten staff members attended the workshop entitled "Co-Active Movement." In order to meet our objective of quality training, we asked respondents the following questions. We used a scale of 1-7, 1 indicating "disagree" and 7 indicating "agree."

- The presentation of material was clear and well organized.

Mean = 6.4

Comments:

Sequence was good/easily understood.
Presenter confident of knowledge of material/answered questions directly.
Yes, but I have little knowledge of population it would be appropriate for.

- The length of the training program was appropriate to the amount of material provided.

Mean = 6.2

Comment:

Disagree. Topic needs more time and hands on experience.

- The material was presented in a stimulating and interesting manner.

Mean = 6

Comment:

Gave many examples of children's reaction to co-active movement.

- You expect that your job performance will be improved by the training program.

Mean = 6

Comments:

Yes, especially since I was given a working understanding of the program.
Will use in future.
How appropriate is entire program for my students?

- You would recommend the program to other human services workers as a valuable educational experience.

Mean = 6.6

Comment:

Important for anyone working with multiply handicapped.

- What was most helpful to you about the training program?

Comments:

Questions/answers.
Theoretical interpretations/explanations.
Specific suggestions re how to carry out program.
Excellent handouts.
Good overview.
Lecture.
Clarified questions.
Confirmation of my teaching style.

- What was least helpful?

Comments:

Physical setting.
Background info (because had previously).

- What would you recommend to improve the program?

Comments:

Visual presentation.
More examples.
Demonstration.

- Please list topics you might be interested in for future workshops.

Comments:

Designing classroom space.
Inter- vs. trans- disciplinary teams.
Scheduling.
Materials for language development.
Play with the multiply handicapped.
Neurology and abnormal neurology.

3. C.A.S.E. Collaborative

A. OBJECTIVE: Given Project CoNECT's emphasis on individualized services, consultation provided to each collaborative varied significantly. The C.A.S.E. Collaborative class with which Project CoNECT was involved was housed in the McCarthy-Towne Elementary School. Its principal, faculty, and collaborative staff were very interested in achieving a successful and sustainable mainstreaming program. Rather than identify disparate short-term objectives, the Project consultant and this collaborative specified a long-term goal -- to develop a viable and effective mainstreaming component which would eventually maintain itself without the support of Project CoNECT. Although the consultation plan revolved around a three-year strategy of action, sub-components were identified. Evaluation is based on the long-term goal.

ACTIVITIES (1981): After three strategy planning meetings with the Principal, the Special Needs Teacher, the Resource Room Teacher and the School Counselor, an initial plan was decided upon in November, 1981. The plan was to introduce an "Understanding Handicaps" curriculum to the school and to mainstream some of the children in special needs classes into regular classes. The Project consultant visited each kindergarten through grade 3 classroom (nine in total) to discuss the topic of mainstreaming with each teacher and to observe special needs children in the regular classroom. Each visit lasted the entire school day.

In addition, two, two-and-a-half-hour workshops were held for C.A.S.E.

and McCarthy-Towne faculty. The topics were: "Mainstreaming: Teachers' Perspectives, Children's Perspectives" and "Communication Between Regular and Special Needs Personnel."

Evaluation: Several meetings were held among the Project CoNECT coordinator, the C.A.S.E. administrator and the McCarthy-Towne principal throughout the year to discuss difficulties in implementing the contract. It was agreed that a highly positive working relationship had been established between the Project coordinator and McCarthy-Towne staff but that the Principal's "Mainstreaming" curriculum had become too large and unfocused an undertaking, given Project CoNECT's limited consultation time. It was decided that Project CoNECT's role should be modified to become more effective, but all generally agreed that much had been learned by the experience of the past year.

ACTIVITIES (1982-84): In June of 1982, a revised plan for a mainstreaming project had been developed. This plan was initiated in September of 1982 after three planning sessions, and it was elaborated during that and the 1983-84 school years. The multifaceted plan involved utilizing sixth graders as tutors in the preschool special needs classes. In the beginning of the 1982-83 school year, the special-needs teacher visited each of the sixth grade classes and described her class, discussed the children's special needs, and answered questions the sixth graders had. Each sixth grader was then invited to visit the preschool classes. After the visit, the older students were invited to tutor and assist in one of the two classes for a total of 45 minutes per week. Each tutor would participate for the entire semester, with a new group starting the second semester.

Participants were given the option of meeting with the generic counselor each week for 45 minutes of supervision. Eight of the 25 volunteers chose to participate in these meetings. The Project consultant met with this group every other week for two years. The sessions began with a few minutes

of the children's questions, comments and reactions. An informative presentation followed. Topics included information on cerebral palsy; Down's Syndrome; hearing impairment; the role of the occupational therapist; the role of the physical therapist; and the role of the speech therapist. There were also particular discussions on individual children and presentations by parents of the handicapped students on family life. Slides and hand-outs supplemented the discussions. The group leaders used role-playing and positive reinforcement to involve the children and establish desired attitudes, behavior, and knowledge. Each session included a five-minute lesson in basic sign language. Brainstorming for the next session concluded the supervision meeting. At the end of the school year, the sixth graders attending the supervision requested and received permission to visit the kindergarten through fifth grade classes, accompanied by a C.A.S.E. teacher, to answer their schoolmates' questions about special needs.

After each meeting, the Project CoNECT consultant would meet with each of the staff involved in the mainstreaming project and also meet with the principal to facilitate communications. The consultant made fourteen visits to the supervision groups. In addition, she made bi-monthly telephone calls to the generic counselor who ran the supervision sessions. Upon request she made four, day-long visits to classes to observe and make recommendations about specific children.

The mainstreaming component became better established the third year of Project CoNECT's involvement. Each sixth grader was introduced to the preschool special needs class via a discussion centering on a slide-tape that the consultant had helped the staff to develop. During the second year of this program, a total of 32 sixth graders were involved. All 32 were now required to attend the supervision session as well as participate for 45 minutes in the classroom. In addition, during the four planning sessions that the consultant held with the principal, the C.A.S.E. teacher, and the

supervision leader, it was proposed that the students keep journals. In their journals the students wrote comments and reactions to situations in the class. They also recorded the numerous questions that arose but that the teacher could not answer during class. The questions could be addressed by her later or brought up in the weekly supervision session.

The sixth graders planned and implemented a workshop for their schoolmates in 1984. They set up stations in the cafeteria where peers could interact with materials designed for the handicapped or try to experience what it is like to be handicapped. They had a station for the visually impaired which included use of Braille materials, walking an obstacle course blind-folded and using a cane, wearing distorting glasses and attempting tasks, etc. The station for the physically impaired included immobilizing one leg and trying to carry a loaded cafeteria tray while using a walker, manipulating a wheelchair through an obstacle course, and trying to make a sandwich one-handed. Other stations were simulations of fine motor problems, learning disabilities, and hearing impairments. The sixth graders explained the disabilities and remediation strategies wisely and with insight in answer to their peers' many questions.

In addition to her participation in the mainstreaming project, the consultant also made herself available to the special needs teachers for individualized consultation. She observed and made recommendations about specific children on three different occasions.

Evaluation. This program demonstrated its effectiveness in many ways. The number of children committing themselves to the project increased from 25 to the maximum (32) that could be accommodated over the two semesters. The program received major publicity in two newspaper articles: It was described in the Lowell Sun on Monday, February 17, 1983, and the sixth graders' Handicaps Workshop was reported in the Lowell Sun on Sunday, January 22, 1984 (see Appendix D). Response from both the parents of special

needs students and the parents of sixth graders was overwhelmingly positive. Unfortunately, the data that had been acquired in the first year of the mainstreaming project about changes in attitudes of sixth graders were lost during a major school move. This loss is slightly mitigated, however, by the apparent success of the project. Plans are to continue the program as it was last year and to continue it indefinitely. Its value is well supported by the principal, faculty, staff, parents, and, not least of all, by the students themselves. The McCarthy-Towne principal summarized the benefits of this program best in the letter that he sent to this year's tutors. This letter is included as Figure 4.

Insert Figure 4 about here.

4. North Shore Consortium

A. OBJECTIVE: To provide monthly in-classroom consultation to four teachers, a social workers, and therapy aides on topics requested by them following a period of observation by the consultant during the 1981-82 year.

ACTIVITIES: Eleven consultation visits were made, most of them lasting from 9 a.m. to 2 p.m. Consultation topics ranged from adapting the classroom environment to better dealing with a specific child's behavior problems, family issues, informal assessment, information dealing with a self-abusive child, hospitalizations of children, regressive behaviors, and curriculum ideas.

Evaluation. Although no formal evaluation took place, client satisfaction was obvious from the enthusiastic response of the staff and their desire to have Project CoNECT work with them the next year. Informal discussions with the staff indicated that they most valued the consultant's knowledge of social-emotional needs, since they felt they were weaker in this area than in cognition and educational programming.

Figure 4
PRINCIPAL'S LETTER

May 15, 1984

Dear Sixth Grade C.A.L.E.
Volunteer Tutors,

This week the last group of you who participated in the Tufts-C.A.L.E. McCarthy-Towne Project this year finished your assignments. On behalf of the school, and the large community we serve, I want to thank you for your hard work. I know that the C.A.L.E. children and faculty you worked with benefitted from your efforts a great deal. I also know that the school as a whole benefitted through your showing and teaching other students how to be more aware of, sensitive to, understanding of, and helpful to all others in our community regardless of age or particular ability. My guess is that you too learned a great deal from this experience. Your participation in the T.C.M. Project may be something you will always remember.

Best wishes,
Parker

B. OBJECTIVE: To lead group inservice meetings focusing on topics requested by staff.

ACTIVITIES: Three, two-and-one-half-hour workshops were held for the entire early childhood staff of the Consortium, approximately 15 to 20 people. The topics included "I.E.P. Writing," "Assessment Techniques," and "Report Writing."

Evaluation. About 15 to 20 staff attended each session. Discussion with the staff indicated that they enjoyed and valued the workshops. The only suggestions made were to have more of them and to establish the topics early in the school year so that there would be time for individualized follow-up.

C. OBJECTIVE: During the 1982-83 school year, the consultant will provide individual consultation to the two preschool teams at least once a month each. These individualized consultations will be based upon teachers' specified needs and will usually follow a period of observation.

ACTIVITIES: The entire North Shore Consortium revised its program, and the two preschool classes moved to a separate building. Therefore the focus of consultation changed from providing group workshops for an interdisciplinary team to providing individualized consultation in an in-depth fashion to the two preschool classes. Therefore twenty-two visits were made to the Consortium over the school year, each averaging two to four hours. The visits included a period of observation followed by discussion. Often these discussions were held after school. Topics varied depending on need and included diagnostic and programming information regarding specific children, curriculum ideas, classroom environment changes, and student teachers. Books and other resources from the Project CoNECT library were lent.

Much discussion centered around the new aspect the program was developing. The position of Early Childhood Special Education Coordinator was eliminated after the Project's year of contact with this consortium. Therefore attention

went from the supervisor and faculty to faculty alone. The program emphasis became one of integrating "neighborhood," non-special-needs children with the handicapped population. The consultant helped develop and assist this integration and aided the teachers in providing curriculum appropriate for bright as well as delayed students.

Evaluation. Informal discussion with the two teachers indicated a very positive response to the consultation received from the Project. The Consortium's respect for the Tufts program and interactions is demonstrated by the fact that this year they hired two Tufts students who had done their internships there.

D. OBJECTIVE: The consultant will continue to provide individualized consultation to the two preschool teams at least once a month during the 1983-84 school year. The topics will be selected by the Consortium staff with whom the Project is involved.

ACTIVITIES: Eighteen observation and discussion sessions occurred during the 1983-84 school year. Eight of these sessions involved observations of individual students, programming, or supervision observations of student teachers. One involved an in-depth analysis of a specific child's needs. A second was requested by the consultant to recommend changes in class activities so as to meeet better the needs of the higher functioning children, and a third addressed curriculum (e.g., readiness activities, music and art ideas, etc.) recommendations. Once during the year, the consultant was asked to act as a mediator during a staff dispute. She called together all interested participants and assisted them in problem-solving and establishing a means for better communication in the future.

Evaluation. Because the Consortium staff were unidentified among the group requested to complete the anonymous final evaluation, no data specific to the Consortium were acquired. Discussions with the staff indicate their involvement with Project CoNECT has benefited their program significantly.

5. Multi-Collaborative Objectives

Several identical objectives were developed for each of the four collaboratives. Because of the similarity of the collaboratives' needs, several group activities were provided in addition to individual consultation.

A. OBJECTIVE: To enhance communication among collaboratives' staffs at all levels.

ACTIVITIES: On May 12, 1982, Project CoNECT sponsored a luncheon for collaborative administrators. This "Administrators' Forum" encouraged directors from participating collaboratives to discuss issues of common concern.

Evaluation. Two of the four directors were able to attend this meeting. Informal evaluation indicated that they thought this meeting was valuable. Throughout the years of the Project, all four administrators requested more of these meetings. The difficulty of scheduling sessions that all four directors could attend prohibited them. However, all four collaboratives were invited to designate an administrator, a staff person, and a parent to participate on the Advisory Board. Communication was facilitated during these meetings held on October 19, 1981 and April 26, 1982.

ACTIVITIES: A handout was developed by the Project CoNECT staff to expedite visits among the collaboratives' staffs. Reproduced as Figure 5, this provided each collaborative with a list that included the location of each program, the names of the teachers, the age range of the children served in each class, the types of handicapping conditions, and the highlights of the program.

Insert Figure 5 about here.

Evaluation. As reviewed above in the final Project evaluation, all respondents felt that intercollaborative communication is of great importance. On May 12, 1982, EdCo hosted a workshop and invited collaboratives' staffs to visit the classes before the session. Representatives from all four

Figure 5

PROJECT CoNECT CLASS LISTING TO FACILITATE INTERSITE VISITS

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

EdCo Brookline-Newton Preschool Program (Director, Judy Medalia, 332-5588)

Class and location	Teacher	Age range	Class type	Highlights
Baker School 205 Beverly Rd. Chestnut Hill, MA 734-1111 x 315	Lisa Bartmon	3½-6	Multiply Handicapped	Use of alternative communication systems, particularly picture symbol systems. Transdisciplinary model, highly structured programs.
Oak Hill School 130 Wheeler Rd. Newton Centre, MA 332-5588	Jessica Weissman	3-6	Moderately Developmentally Delayed, some physical handicaps	Transdisciplinary model, individualized instruction, developmental strategies
Transition Class (Mildly Handicapped) Memorial Spaulding Sch. 250 Brookline St. Newton, MA 552-7563	Mary Wiley	4-6	Mildly Handicapped	Emotionally supportive therapeutic environment within a kindergarten curriculum structure

Shore Collaborative (Program Supervisor, Amy Bernstein, 387-9705)

Lindemann Center 25 Saniford St. Boston, MA 742-2680	Liz Hendersen Donna Beallier Shelly Mitwell Debbie Lambert (OTR) Wendy Potash (OTR) Lydia Bauman (OTR)	Severely Multiply Handicapped	Transdisciplinary team teaching, behavioral intervention strategies, beginning use of active responding equipment

Medford, Massachusetts 02155
617 628-5000

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

North Shore Consortium (Program Supervisor, Tom Belski, 535-6197

Class and location	Teacher	Age range	Class type	Highlights
Preschool Class Hadley School Contact through Consortium Office McCarthy School 70 Lake St. Peabody, MA 535-6197	Eileen Mead Egan	3-4	Integrated preschool	Integrated 3 days/4 non s.n. 6 s.n. 2 days/6 s.n. Emphasis on language cognition and social skills. Transdisciplinary dev. approach. Indiv. instruction
Early Childhood Class Hadley School (See above.)	Kathy Mason	6-8	Moderately Developmentally Handicapped	Language development, school readiness, basic skills

C.A.S.E. (Director, Gerry Mazor, 369-8798)

McCarthy-Towne Program Charter Rd. Acton, MA 263-4892	Donna Marcotte	5-7		Individualized instruction, school readiness, language groups, developmental approach
	Debbie Goessling	5-8		Individualized Instruction, developmental approach, behavioral intervention
Preschool Program Smith School Ballfield Rd. Lincoln, MA 259-9291.	Betsy Earl	3-6	Moderate to severe and Multiply Handicapped	Transdisciplinary model, highly structured combination of developmental and behavioral models

Medford, Massachusetts 02155
617 628-5000

collaboratives attended. On February 2, 1983, the collaboratives visited the McCarthy-Towne School in Acton, a C.A.S.E. Collaborative program site, and attended a workshop hosted by them. Shore hosted the collaboratives on April 27, 1983.

As reported in the final Project evaluation, some teachers were unable to visit other sites even though they thought the visits would be valuable inservice training. Three teachers were able to arrange these exchanges, however. One EdCo teacher visited Shore to acquire information on the use of Active Stimulation. Two Shore educators visited EdCo's classes.

ACTIVITIES: Because it was impossible for all teachers to visit other sites, Project CoNECT provided a forum to allow the collaboratives to share information about their programs. Tufts' Department of Child Study hosted a workshop at the Eliot-Pearson Children's School on "The Unique and Innovative Aspects of Collaboratives' Programs" on November 30, 1983. Handouts from this workshop are contained in Appendix E.

Evaluation. Sixteen people were present, representing all four collaboratives. Twelve responses to our questionnaire were obtained. In order to assess the quality of our training, we asked respondents the following questions. We used a scale of 1-7, 1 indicating "disagree" and 7 indicating "agree."

- The presentation of material was clear and well organized.
  Mean = 6.25 Range = 5-7
- The length of the training program was appropriate to the amount of material provided.
  Mean = 5 Range = 1-7
- The material was presented in a stimulating and interesting manner.
  Mean = 6.25 Range = 5-7
- You expect that your job performance will be improved by the training program.
  Mean = 5.67 Range = 5-7
- You would recommend the program to other human services workers as a valuable educational experience.
  Mean = 5.75 Range = 5-7

- What was most helpful to you about the training program?

  Seven participants mentioned one of the four particular presentations as being most helpful. Three sessions received two comments, and one received one comment, indicating that everyone's needs were met through at least one of the presentations. Five of the participants commented that the most helpful aspect of this program was being able to get together with other professionals to share ideas. A typical comment was: [The most helpful was] "the number of presenters and variation in programs. Yet each was unique and unusual in special education. Makes you feel hopeful."

- What was least helpful?

  Seven respondents identified least helpful elements. Five of these had to do with one particular session as not being appropriate to their program and so not helpful at this time. The inference is that at least three out of four sessions were appropriate and helpful to all of the participants. Two comments stated that the workshop was too short.

- What would you recommend to improve the program?

  Three respondents suggested providing more time for each session, even if it meant having two workshops with two collaboratives presenting at each. Two respondents requested that the audiovisual equipment operate better next time.

- Topics of interest for future.

  Topics suggested included: behavior management (recommended by four teachers), pre-vocational skills in young children, non-vocal communication, a round-robin session organized around a specific topic, furtner exploration of mainstreaming.

ACTIVITIES: A major section of each Newsletter published by Project CoNECT was devoted to providing collaboratives with information about each other. This information included program descriptions, the consultation focus for each collaborative, staff changes, exciting happening and awards, and other items (see Appendix F).

Evaluation. Three Newsletters have been written by Project CoNECT. over 300 copies of each issue have been disseminated to collaborative staff, the Advisory Board, and others involved with the Project and in the national and local special education community.

B. OBJECTIVE: To increase knowledge and skills in curricular modification conducive to remediation of, or compensation for, special needs.

ACTIVITIES: Most individual consultation focused upon accomplishing this objective. Training in curriculum was also provided through group activities. Project CoNECT sponsored a workshop on the specific curricular modifications required by the post-trauma child, "Meeting the Classroom and Program Needs of the Post-Trauma Child," on April 27, 1983. This workshop was a response to needs expressed by the collaboratives. The handicaps and disabilities created by accidents, surgery, or disease in children of erstwhile normal development and education post particular challenges for educators and therapists (see Appendix E).

Evaluation. Eleven workshop participants completed evaluations. In order to assess the quality of our training, we asked respondents the following questions. We used a scale of 1-7, 1 indicating "disagree," 7 indicating "agree."

- The presentation of material was clear and well organized.
  Mean = 5.2

- The length of the training program was appropriate to the amount of material provided.
  Mean = 5.2

- The material was presented in a stimulating and interesting manner.
  Mean = 5.1

- You expect your job performance will be improved by the training program.
  Mean = 4.6

- You would recommend the program to other human services workers as a valuable education experience.
  Mean = 5.5

- What was most helpful to you about the training program?

  Specific ideas for particular children.
  Discussion of services available.
  Question and answer time.
  Overview (3 responses).
  Teaching concerns particular to post-trauma children (4 responses).

- What was least helpful?

  Testing information (2 responses).
  Remediation of academic deficits (2 responses).
  Administrative issues.

- What would you recommend to improve the program?

  Wider range of discussion re classroom programming for post-trauma child.
  More specific info re severely impaired (3 responses).
  Concentration on young post-trauma children and their families.
  Use of more specific examples.
  More stimulating presentations.
  More specifics re materials and procedures.

- Please list topics you might be interested in for future workshops.

  Related to topic of post-trauma child:
  - Focus on one specific skill area for classroom.
  - Planning with the post-trauma child.
  - OT/PT services/techniques with post-trauma child.
  - Instructional strategies with post-trauma child.
  - Case studies of post-trauma children.
  - Severely impaired post-trauma children.

  Other topics:
  - Data collection -- analysis and techriques in the classroom.
  - Co-active movement.
  - Physical environment of classroom.
  - Language programs with severely handicapped.

ACTIVITIES: In order to enhance special educators' knowledge and skills, Project CoNECT developed a library of resources. A listing of these resources is enclosed as Appendix C. Staff were made aware of these resources initially through an article in the first Newsletter. Updates on resources were enclosed in each subsequent Newsletter (see Appendix F). Specific recommendations were also made by consultants during on-site visits or when a collaborative staff person came to the Department of Child Study to review the collection.

Evaluation. The Project CoNECT materials were widely disseminated. Their value has been commented upon frequently by each collaborative.

ACTIVITIES: A new curricular area that is having a significant impact upon educational programming, and especially upon that for the severely handicapped, is that of computers. Project CoNECT addressed this new topic

in two articles in the Newsletter. In the spring of 1983, this topic was introduced through an article entitled "Microcomputers in Special Education." It was a review of information acquired by one of the consultants at the national workshop sponsored by the Council for Exceptional Children in Hartford, Connecticut. Its author elucidated the contributions of computers and concluded by offering to provide more specific information to anyone who was interested.

The consultants received so many requests about computers that an article was published in the next Newsletter in the fall of 1983. This article went into more detail about the use and potential of computers and concluded with a list of resources and a selected bibliography. See Appendix F for both articles.

Evaluation. The quantity of inquiries indicated what a popular topic this has become. Collaborative staff have expressed gratitude for being able to acquire information about this new technology. Two collaboratives in particular have adapted the switches for use with severely motorically impaired students. One of these presented a session on this active stimulation at the "Unique and Innovative Aspects" workshop in the fall of 1983. A third collaborative is beginning to use these techniques with one particular student.

ACTIVITIES: The Summer Institutes also addressed curricular modifications and therapeutic implications of specific disabilities. Some topics from each of these are as follows: "Causes of Handicapping Conditions"; "Spina Bifida -- Causes, Treatment, and Management"; "Neuromuscular Disorders"; "Cerebral Palsy"; "Down's Syndrome from the Medical Perspective"; and "Seizures -- Diagnosis, Treatment, and Management."

Evaluation. The Summer Institutes have been consistently highly acclaimed. The specific details of their evaluations can be found in Section V.

C. OBJECTIVE: To increase knowledge and skills in consultation and communication strategies to enhance the quality of collaboration among professional and paraprofessionals servicing a child (the multidisciplinary team) and between school staff and parents.

ACTIVITIES: To improve home/school interactions, Project CoNECT sponsored a workshop, "Families Under Stress: Coping with Pressures of Our Partnership with Parents," presented on May 18, 1982. This workshop was hosted by the EdCo Collaborative. A panel of professionals discussed how to help parents to cope with the multiple problems of rearing a child with special needs (see Appendix E).

Evaluation. Sixteen people, representing all four collaboratives, attended this workshop. In order to assess the quality of our training, we asked respondents the following questions. We used a scale of 1-7, 1 indicating "disagree," 7 indicating "agree."

- The presentation of material was clear and well organized.
  Mean = 5.5 Range = 3-7 N = 15

- The material was presented in a stimulating and interesting manner.
  Mean = 6.2 Range = 4-7

- You expect that your job performance will be improved by the training program.
  Mean = 3.8 Range = 2-6

- You would recommend the program to other human services workers as a valuable educational experience.
  Mean - 4.1 Range = 2-7

- What was most helpful to you about the training program?

  11 people felt various aspects of the presentation were most helpful.

  4 people felt the discussion on coping skills and sharing re priorities/decision for cutbacks was helpful.

  One person noted the hand-outs as helpful.

- What was least helpful?

  Several people mentioned the discussion component as least helpful. Two general reasons for this emerged.
  1. Lack of solutions for so many questions raised.
  2. Discussion turned to "professionals under stress" rather than maintaining focus on families and children.

- What would you recommend to improve the program?

  Suggestions fell into a few general categories. The most frequent suggestion was to provide more structure to the discussion section. Another was to present more information presented by the speakers, especially on preschool families.

  Offering it at a different time of year and providing more resource information were also recommended.

- Please list topics you might be interested in for future workshops.

  Topics suggested were:
  Information sharing among collaboratives, particularly regarding program design with limited funding.

  Teachers under stress.

  Role of teacher with parents and other professionals.

  Social-emotional needs of young special needs children.

When anonymous evaluations for the entire three-year grant were obtained from the collab oratives during the last year of the Project, this workshop earned a mean rating of 2.33 from the five teachers who responded (with a range of 2-3). Three project directors rated this workshop, on the average, at 1.7 (with a range of 1-2). A score of 1 indicates that the workshop had a great impact on the teacher's skills and knowledge, whereas a score of 4 indicates that it had little impact.

ACTIVITIES: On February 2, 1983, the McCarthy-Towne School in Acton, a C.A.S.E. Collaborative program site, hosted a Project CoNECT Intercollaborative Workshop on "Siblings of the Developmentally Disabled." Twenty-eight professionals and paraprofessionals, representing each of the four Project CoNECT collaboratives (C.A.S.E., EdCo, Shore, and North Shore Special Education Consortium) participated. Karen Cahill and Kristine Opalka, nurses from the Eunice K. Shriver Center in Waltham, presented an overview of the literature on siblings of the disabled and summarized the very exciting work their center has been doing over the past seven years with short-term groups for siblings of DD children. The various issues and needs of children at different developmental levels were presented, along with examples of activities and

procedures useful for groups of preschoolers, school-aged children, and adolescents. Among the activities were exercises aimed at demonstrating the experiences and perspectives of the disabled child, role-playing to explore common family situations, and board games adapted to engage the children in problem solving.

Evaluation. In order to assess the quality of the training, we asked the 28 participants to respond to the following questions. We used a scale of 1-7, 1 indicating "disagree," 7 indicating "agree."

- The presentation of material was clear and well organized.
  Mean = 5.3 Range = 5-7

- The length of the training program was appropriate to the amount of material provided.
  Mean = 6.7 Range = 6-7

- The material was presented in a stimulating and interesting manner.
  Mean = 6.6 Range = 6-7

- You expect that your job performance will be improved by the training program.
  Mean = 6 Range = 5-7

- You would recommend the program to other human services workers as a valuable educational experience.
  Mean = 6.3 Range = 6-7

- What was most helpful to you about the training program?

  Participants particularly mentioned having enjoyed hearing about the groups and seeing the slide presentation on one preschool group. Some discussion focused on how to provide such needed services to families -- either through referral to the Shriver Center or through program development in the collaboratives or local communities. Other discussion focused on the implications of how Cahill's and Apalka's work could be utilized for home visiting and family work in many settings.

ACTIVITIES: The workshop, "Unique Aspects of Collaboratives' Programs," was designed to provide an opportunity for collaborative staff to demonstrate professional communication skills by presenting information about each of their programs. This session was held on November 30, 1983, at Tufts' Eliot-Pearson Department of Child Study. A representative or panel from each collaborative presented some aspect of her/their program.

Evaluation. Sixteen people were present, representing all four collaboratives. Twelve responses were obtained, results of which have been previously reported.

ACTIVITIES: The Summer Institutes were designed to provide educators with the knowledge necessary to understand and communicate with professionals of related fields, such as physicians, occupational therapists, physical therapists, etc. Communication between referral scurces and evaluation teams would thus be improved, as would communication among members of interdisciplinary educational teams. Teachers knowledgeable about these medical aspects would also be more able to interpret information for parents.

Evaluation. The Summer Institute evaluations are presented and analyzed in detail in Section V. All Institutes have been very well received.

Section V

Evaluation of Subcomponent III:

Medical and Rehabilitative Aspects of Childhood Disorders

Program Description

A Summer Institute, "Medical and Rehabilitative Aspects of Childhood Disorders," was the third component of this project. Professional and paraprofessional personnel employed in collaboratives serving young, handicapped children come from a variety of educational backgrounds. Their training may have been in a single field such as speech pathology or occupational therapy. Yet because they are working with the whole child, and a more complex whole child because of the severity of the disabling condition, these professionals cannot afford to be ignorant about the evaluation procedures, instructional techniques, and theoretical bases of the other professionals who work with handicapped children. Currently, many educational facilities providing services to young, handicapped children have limited resources. Personnel who are specialists may serve as consultants only, leaving the person who has primary responsibility in the classroom -- a teacher or an occupational therapist, for example -- to carry out a treatment plan prescribed by a professional from an unfamiliar discipline. It becomes essential, in these situations, that each professional have a very clear working knowledge of various aspects of several different disciplines. Equipping members of multidisciplinary teams with such knowledge was the major objective of the Summer Institutes. The collaboratives' staffs had also expressed a need for more information about the various disciplines serving the young, handicapped child. The following areas were specifically mentioned: neurology, seizures, language pathology, language disorders.

The Institute met Federal and Massachusetts training priorities for interdisciplinary training. Specifically, the Institute addressed the Massachusetts CSPD priority for training which will broaden the competence of currently employed specialists, including those employed in collaboratives. Retraining to respond to new role demands, which would include functioning

effectively as a team member, was also cited as a training priority. Through the Summer Institutes, this project addressed the longstanding inattention to the needs of other health-impaired (OHI) children with "hidden handicaps" -- for example, a Down's syndrome child with a fluctuating hearing loss, a child with cerebral palsy with a seizure disorder or a child with severe emotional disturbance coincident with a metabolic disorder such as diabetes.

OBJECTIVE: During the summers of 1982, 1983, and 1984, the Institutes provided updated information on medical and rehabilitative treatment and management of the childhood disorders found among severely handicapped children. The specific subobjectives of the Institute follow:

- to provide a review of the causes of handicapping conditions with information about antenatal diagnostic techniques and new diagnostic methods;
- to provide information on currently used techniques for the management and medical and rehabilitative treatment of severely and multi-handicapped, young children;
- to inform paraprofessionals and professionals who work with young, handicapped children about theoretical foundations, evaluation procedures, and treatment techniques that form the bases of contributing disciplines;
- to provide an opportunity for the professionals from various disciplines to talk with one another in an atmosphere that supported exchange rather than isolation;
- to provide an opportunity for non-medical personnel to observe, first-hand, the evaluation procedures, medical treatment, and physical examinations that take place in a pediatric hospital.

ACTIVITIES: Because the grant budget was reduced, the Summer Institutes (Subcomponent III) were only partially supported by Federal funds. The Institute was, however, offered to Project CoNECT participants free of cost to them. Thus the financial responsibility was partially assumed by Tufts University and the personnel at the New England Medical Center Hospital.

The first Summer Institute, "Medical and Rehabilitative Aspects of Childhood Disorders," was held July 6-9 and July 12-15, 1982, at Tufts New England Medical Center. Penny Axelrod, Ed.D., served as the Institute's director, and Jerome S. Haller, M.D., pediatric neurologist at New England

Medical Center and Associate Professor of Medicine at Tufts University School of Medicine, served as the medical consultant. The list of guest speakers, as well as the course outline, may be found in Appendix G.

Eight staff members from the Project CoNECT collaborative programs attended the nearly forty hours of instruction. One other staff member attended for the second week only (twenty hours). None of these participants from the collaboratives elected to take the Institute for graduate credit. The lectures and associated activities were free to the participants, and all attended the full forty hours. In addition to the Project CoNECT participants, five individuals attended the Institute for graduate credit.

Format: Two formats were followed in the Institute.

- lectures and discussions
- observations

The focus of the lectures and discussions was reviewing the causes of handicapping conditions and updating information on diagnostic procedures that are used antenatally as well as with young children. Current practices in the treatment and longer term management of severely and multiply handicapped children were also presented for discussion by physicians and rehabilitation specialists. Opportunities were provided to "practice" multidisciplinary communication via case conferences in which Institute participants played the roles of various professionals. Closed-circuit television and videotaping facilitiated these activities.

Participants also had the opportunity to observe, first-hand, in the multidisciplinary and single-discipline clinics. The multidisciplinary neuromuscular clinic, for example, served as an exemplar for communication among professionals. After each professional had evaluated the youngster, perhaps a boy with the Duchenne form of muscular dystrophy, the team held a case conference. Information from physiatrist, neurologist, physical therapist, nurse, and orthopedist was collated to form a comprehensive treatment plan. This experience provided non-hospital-trained personnel

with a very concrete example of what a youngster experiences when visiting a hospital clinic. This activity, in addition to providing information about the treatment/management of a particular disorder, also raised the professionals' sensitivity to the child's experience of visiting a clinic in a major medical center.

Observations of diagnostic facilities -- for example, the electroencephalography laboratory -- were also made so that the participants had first-hand experience with the situations in which handicapped children may be placed. Rehabilitation services were also available for observation so that professionals from other fields could become more familiar with particular treatment techniques.

The basic format of this Institute has been used successfully over the past five years in the Child Study course, "Deviations in Development and Learning," which is taught over a fourteen-week semester. This Institute was an attempt to provide inservice training in areas of need that have been identified by collaborative personnel. Because the Institute was held in the summer, the content of the course was available to greater numbers of participants than would be expected were the course held during the semester.

Evaluation. All participants were required to take a criterion-referenced, non-graded pretest and a post-test (see Appendix H). Although the tests were not identical, the same or similar pieces of information were requested on both so that some comparisons could be drawn. In general, pretest results showed a confusion about terms related to cerebral palsy (e.g., the definition of spasticity and the classification of different types of cerebral palsy); lack of knowledge about the genetic modes of inheritance; inability to draw accurately a family tree for a recessively inherited disease; lack of knowledge of the physical problems associated with spina bifida, the physical characteristics of Duchenne Muscular Dystrophy, and the objective measures of

hearing. The majority of the group did not know the possible causes for seizures.

On the post-test, all participants demonstrated significant acquisition of information, particularly in knowledge of modes of inheritance for genetic disorders, patterns of inheritability, diseases that can be diagnosed in utero, the definition of seizures and epilepsy, characteristic behaviors of children with seizures, steps to follow when an individual has a seizure, the procedures for obtaining an EEG, problems arising from shunt malfunction in children with spina bifida, definition of the classifications of paralysis in cerebral palsy, and some causes of C.P.

The Institute was rated as highly successful by participants, some of whom reported that the length of time for the amount of material was too brief. The level of instruction was judged to be very good overall.

ACTIVITIES. The second summer institute, "Medical and Rehabilitative Aspects of Childhood Disorders," was held June 27-30 and July 5-8, 1983, at Tufts New England Medical Center. Sandra Baer, M.Ed., served as the Institute's coordinator, and William Singer, M.D., pediatric neurologist at New England Medical Center and Associate Professor of Medicine at Tufts University School of Medicine, served as the medical consultant. The list of speakers, as well as the course outline, may be found in Appendix G. The objectives remained the same as for the first institute.

Evaluation. Eight staff members from the Project CoNECT collaborative programs attended the forty hours of instruction. One other staff member attended for the first week only (twenty hours). One of these participants from the collaboratives elected to take the Institute for graduate credit. The lectures and associated activities were free to the participants taking it without credit. In addition to the Project CoNECT participants, nine other individuals attended the Institute for graduate credit. Of these nine students, two were M.Ed. students in the Special Education certification

program, three were M.A. students, and four were non-Tufts students taking the course for State certification.

Again, participants were required to take a criterion-referenced, non-graded pretest and a post-test. In general, pretest results replicated the 1982 findings and showed similar confusion and knowledge gaps. The post-test results replicated the 1982 findings as well, with all participants demonstrating significant acquisition of information.

Once again, the Institute was rated as highly successful by participants, some of whom wished that it had been longer. The level of instruction was judged to be very good overall. Participants particularly appreciated the exposure to a wide range of specialists/physicians, many of whom generally have very limited time and opportunity to meet with teachers in this fashion.

ACTIVITIES: The third summer institute, "Medical and Rehabilitative Aspects of Childhood Disorders," was held June 25-29 and July 2 and 3, 1984, at the Boston Marriot Hotel and Tufts New England Medical Center respectively. This year the Institute was offered in collaboration with the Fourth Annual Course on Pediatric Rehabilitation sponsored by the Department of Rehabilitation Medicine of Tufts University School of Medicine and New England Medical Center.

Sandra Baer, M.Ed., served as the institute coordinator, and William Singer, M.D., pediatric neurologist at New England Medical Center, served as the medical consultant. The list of guest speakers, the course outline, and the faculty list may be found in Appendix G.

During the first week of the Institute, participants joined members of the course on pediatric rehabilitation for the morning sessions. In the afternoons they met in smaller "education-track" workshops. The last two days of the Institute, July 2 and 3, included additional small-group sessions as well as the use of hospital and clinic facilities for observation.

Evaluation. Twelve staff members from Project CoNECT collaborative programs attended the forty hours of instruction. In addition to the Project

CoNECT participants, all of whom elected not to take the course for credit, three Master's level students attended for graduate credit. Two of the graduate students were from the Psychology Department, and one was from the Department of Child Study.

Again, participants were required to take a criterion-referenced, non-graded pretest and a post-test. This year, pretest results showed lack of knowledge about the genetic modes of inheritance, possible causes of seizures, and the major components of an audiological exam. Over one third of the participants had incomplete information regarding the reasons for referring a child for a neurological evaluation, methods of diagnosing Duchenne's muscular dystrophy and cerebral palsy, and physical problems associated with spina bifida. There was also some confusion related to the classification of different types of cerebral palsy.

On the post-test, participants demonstrated significant acquisition of information, particularly in knowledge of modes of inheritance for genetic disorders, patterns of inheritability, classification of different types of cerebral palsy, and causes of cerebral palsy. In addition, post-tests reflected participants' increased information regarding medical problems associated with Down's Syndrome, when to refer a child to a neurologist, steps to follow when an individual has a seizure, treatment and management issues for a child with spina bifida, and psycho-social consequences of head injury in childhood.

The Institute was received with great enthusiasm and rated as highly successful by participants. The level of instruction was rated from very good to superior.

Based on feedback the instructor received through conversations with participants, they were unanimously impressed by the level of up-to-date information that was presented. Participants also were extremely grateful for their exposure to physicians, physical therapists, occupational therapists,

and mental health professionals who are in the forefront of their respective fields.

Appendix A

Massachusetts Comprehensive System of Personnel Development

Division of Special Education

The Commonwealth of Massachusetts
Department of Education

31 St. James Avenue, Boston, Massachusetts 02116

M E M O R A N D U M

TO: Division of Special Education Associate Commissioner and Bureau Directors, Massachusetts CSPD Council, and Special Education Training Program Liaison Group

FROM: Gerry Ryan, Coordinator, Comprehensive System of Personnel Development

RE: Massachusetts Special Education Training Priorities for EHA Title VI-D (Personnel Preparation) Proposals from Institutions of Higher Education and Other Agencies - FY 1981-1983

These priorities deal with preparation of persons concerned with the education of children with special needs in facilities such as public schools, collaboratives, community residences, homes, private schools, institutional schools, state hospitals, correctional facilities, pediatric nursing homes, and special education programs administered by other public or private agencies.

FIRST PRIORITY

1. Preservice preparation of special education personnel from bilingual and minority groups, including both development of new training programs and recruitment of bilingual/bicultural personnel into existing special education training programs; in-service training of non-bilingual personnel in non-discriminatory assessment and education of non-bilingual/bicultural children with special needs.

2. Preparation of special education personnel in the areas of vocational education and career education (preservice and in-service)

3. Training of regular education teachers at all levels (a) to work with children with special needs in the regular classroom dealing with attitudes as well as knowledge and skills, and (b) to work cooperatively with specialists (preservice and inservice, with emphasis on field-based inservice training).

   Special education training for general education administrators in public schools and other agencies. (preservice and in-service)

4. Preparation of adapted physical education and therapeutic recreation specialists (pre and in-service), and specialized training for currently employed physical education and recreation personnel. (in-service)

5. Collaboration between institutions of higher education and public schools, collaboratives, private schools, institutional schools and/or human services agencies to provide inservice training. (coursework and/or degree programs for currently employed personnel)

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* This priority must be addressed by all training grant proposals. Each applicant should include at least one support letter from a cooperating public school, collaborative, institutional school, etc., in the grant application. All proposals should address at least one additional priority.

SECOND PRIORITY

6. Special education training for special education administrators in public schools and other agencies. (preservice and inservice)

7. Training regarding various aspects of special education for members of policy making groups, such as school committees, human services boards, etc. (inservice)

8. Field-based special education training for education personnel employed in integrated and specialized programs for young children with special needs. (inservice)

9. Preparation of secondary level (Junior and Senior High) special education personnel for formal and informal settings. (preservice and inservice)

10. Training to broaden the competence of specialist personnel currently employed in public schools, institutional schools, collaboratives, private schools, and other public agencies, e.g., social workers, speech, psychology, guidance, physical education and recreation personnel, inlcuding: a) retraining to respond to new role demands, e.g., functioning effectively as team members and b) development of new skills. (inservice)

11. Retraining of currently employed categorically trained teachers to function as resource teachers or special class teachers (Moderate Special Needs), working with children with a variety of Moderate Special Needs. (NOTE: This priority deals with inservice only, not preservice preparation of personnel in the area of Moderate Special Needs.)

12. Retraining of regular and special education teachers as Generic Special Teachers (with emphasis on long-term inservice training of personnel currently employed in the public schools). NOTE: This also addresses # 3, Regular Education Inservice.

THIRD PRIORITY

13. Training of professionals to work effectively with parents of children with special needs, and with paraprofessionals. (preservice and inservice)

14. Preparation of teachers, paraprofessionals, and other support personnel to educate children with severe special needs. (preservice and inservice)

15. Training of parents, surrogate parents, and paraprofessionals relative to rights, legislative intent, programs, and parents' responsibilities, and working with children with special needs and with professionals. (preservice and inservice).

16. Continuation of support for specialized programs which train personnel to work with children with low incidence handicaps, in response to state, regional and national needs (Vision, Audition, and deaf-blind-multihandicapped preservice and inservice).

17. Preparation of support personnel (Occupational Therapists, Physical Therapists, Speech Therapists) to work in educational as well as clinical settings (preservice and inservice).

Appendix B

Massachusetts State Certification Requirements for "Teacher of Young Children with Special Needs"

TUFTS UNIVERSITY
ELIOT-PEARSON DEPARTMENT OF CHILD STUDY

Teacher of Young Children with Special Needs (3-7 years old)

(a) Requirements

1. completion of a pre-practicum consisting of 30 semester hours of course work and other experiences as defined in Standards I - V below

2. completion of a practicum, judged successful on the basis of Standards I - V, one-third of which must be with young children (3 - 7 years old) identified as needing special education, and one-third of which must be with young children not so identified

(b) Standard I. The effective teacher of young children with special needs knows:

1. developmental psychology and the psychology of early childhood in general

2. in particular, the characteristics and the educational, social, and emotional significance of developmental deviations and special needs

3. theories of learning; theories of language acquisition, the normal sequence of language development, and the effect of language disorders on learning.

4. characteristics of family, parent - child, and sibling relationships, and their significance for young children with special needs

5. the subject matter of early childhood education

6. federal and state laws and regulations pertaining to special education, and community and governmental resources for young children with special needs

(c) Standard II. The effective teacher of children with special needs communicates clearly, understandably, and appropriately. To meet this standard, the candidate will demonstrate that he or she:

1. uses language appropriate to the age, developmental stage, and social, racial, and linguistic background of his or her students

2. makes the goals of teaching and learning activities clear to students

3. gives clear and concise directions and explanations

4. uses non-verbal communication appropriately and alternative communication systems as needed

5. listens to students

(d) Standard III. The effective teacher of children with special needs designs instruction to facilitate learning consistent with the needs and interests of learners and so as to maintain a sense of purpose and order in the classroom. To meet this standard, the candidate will demonstrate that he or she:

1. systematically observes and records student behavior and student-teacher interaction

2. consults with other school personnel, other professionals, and parents concerning specific techniques for motivation

3. develops and implements appropriate educational plans

4. designs and implements appropriate instructional programs, both academic and vocational

5. selects, adapts, and designs materials and procedures for learners in these programs

6. identifies and adapts environmental elements in the classroom which will enhance learning

7. uses a variety of instructional techniques

(e) Standard IV. The effective teacher of children with special needs uses the results of various evaluative procedures to assess the effectiveness of instruction. To meet this standard, the candidate will demonstrate that he or she:

1. uses and interprets evaluative procedures appropriate to the age, developmental stage, social, racial, and linguistic background, and ability of his or her students

2. monitors progress through periodic checks of individual students' mastery of specified objectives

3. systematically uses data from observation and assessment to make decisions on programmatic changes

4. evaluates his or her own role, behavior and performance

(f) Standard V. The effective teacher of children with special needs is equitable, sensitive, and responsive to all learners. To meet this standard, the candidate will demonstrate that he or she:

1. responds to the needs of individual students so as to enhance their self-esteem and development

2. establishes constructive relationships with parents and others primarily concerned with the well-being of his or her students

3. works to develop a learning environment which is favorable to openness of inquiry and devoid of ridicule

4. makes allowances for biases and limitations in his or her own background which restricts his or her responsiveness to students from other backgrounds

Appendix C
Bibliographies

Project CoNECT Library

Alder, J. O. & Magrab, P. R. Coordinating service to handicapped children. Baltimore: Brookes, 1980.

Anastasiow, N. J., Frankenburg, W. K., & Fandal, A. W. Identifying the developmentally delayed child. Baltimore: University Park Press, 1982.

Anderson, E. M. & Spain, B. The child with spina bifida. London: Methuen & Co., 1977

Batsnaw, M. & Perret, Y. Children with handicaps: a medical primer. Baltimore: Brookes, 1981.

Berger, E. H. Parents as partners in education. London: C. V. Mosby Co., 1981.

Bigge, J. Teaching individuals with physical and multiple disabilities, 2nd ed. Columbus, OH: Charles E. Merrill, 1982.

Bricker, D. (Ed.) Intervention with at-risk and handicapped infants: From research to application. Baltimore: University Park Press, 1982.

Campbell, H. Measuring the abilities of severely handicapped students. Springfield, IL: Charles C. Thomas, 1981.

Campbell & Baldwin. Severely handicapped/hearing impaired. Baltimore: Brookes.

Gabel, S. & Erickson, M. T. Child development and developmental disabilities. Boston: Little, Brown, 1980.

Gallender, D. Teaching eating and toileting skills to the multihandicapped in the school setting. Springfield, IL: Charles C. Thomas, 1980.

Goetz, E. M. & Allen, K. E. (Eds.). Early childhood education: Special environmental policy, and legal considerations. Rockville, MD: Aspen Systems, 1983.

Goldenberg, E. P. Special technology for special children. Baltimore: University Park Press, 1979.

Goldman, J., Stein, C., & Guerry, S. Psychological methods of child assessment. New York: Brunner/Mazel, 1983.

Greer, A., Anderson, R. M., & Odle, S. J. Strategies for helping severely and multiply handicapped citizens. Baltimore: University Park Press, 1982.

Haring, N. G. & Brown, L. J. (Eds.) Teaching the severely handicapped, Vols. 1 & 2. New York: Grune & Stratton, 1976.

Haring, N. G. Uniform performance assessment system. Columbus: Charles E. Merrill, 1981.

Healy, H. & Stainback, S. B. The severely motorically impaired student. Springfield, IL: Charles C. Thomas, 1980.

HICOMP Project, Hicomp curriculum package. University Park, PA: Penn State University, 1977.

Hinerman, P. S. Teaching autistic children to communicate. Rockville MD: Aspen, 1983.

Idol-Maestas, L. Special educator's consultation handbook. Rockville, MD: Aspen Systems, 1983.

Jansma, P. Psychomotor domain and the severely handicapped.

Kissinger, E. A sequential curriculum for the severely and profoundly multi-handicapped. Springfield, IL: Charles C. Thomas, 1981.

Kreger, R. D. & Kreger, L. The Kreger model: A developmental approach for assessment and intervention with emotionally disturbed, exceptional and normal children in emotional and social realms. Boston: Northeastern University Custom Book Program, 1982.

Lewis, M. & Taft, L. T. (Eds.). Developmental disabilities: Theory, assessment, and intervention. New York: Spectrum, 1982.

Linder, T. W. Early childhood special education: Program development and administration. Baltimore: Paul H. Brookes, 1983.

Lovass, O. Ivar. The me book. Baltimore: University Park Press, 1981.

McCormack, J. E. & Chalmers, A. J. Teaching sequences: Early cognitive training for the severely and moderately handicapped. Champaign, IL: Research Press, 1978.

Michaelis, C. T. Home and school partnership in exceptional education. Rockville, MD: Aspen Systems, 1980.

Mori, A. A. Families of children with special needs: Early intervention techniques for the practitioner. Rockville, MD: Aspen Systems, 1983.

Mullins, J. Education and management of the physically handicapped. Springfield, IL: Charles C. Thomas, 1979.

Musselwhite, C. R. & St. Louis, K. W., Communication programming for the severely handicapped. San Diego, CA: College Hill Press, 1982.

Pluma, S., Sheara M., Frohman, A. & Hilliard, J. Portage guide. Portage, WS: Portage Project.

Rutter, M. (Ed.). Scientific foundations of developmental psychiatry. Baltimore: University Park Press, 1981.

Sailor, W. & Guess, D. Severely handicapped students: An instructional design. Boston: Houghton Mifflin Co., 1983.

Sailor W., Wilcox, B., & Brown, L. Methods of instruction for severely handicapped children. Baltimore: Paul H. Brookes, 1980.

Sapir, S. G. & Cort, R. H. Children with special needs: Case studies in the clinical teaching process. New York: Brunner/Mazel, 1982.

Sasserath, V. J., (Ed.) Minimizing high risk parenting. Johnson & Johnson Baby Products Co., 1983.

Schafer, D. S. & Moersch, M. S. (Eds.) Developmental programming for infants and young children. Ann Arbor: University of Michigan Press, 1981.

Seligman, M. (Ed.) The family with a handicapped child: Understanding and treatment. New York: Grune & Stratton, 1983.

Simpson, R. L. Conferencing parents of exceptional children. Rockville, MD: Aspen Systems Corp., 1982.

Sterenberg, L. & Adams, G. Educating severely and profoundly handicapped students. Rockville, MD: Aspen Systems Corp., 1982.

Tallarico, R. & Slusher, F. H. Taxonomy of behavioral objectives for habilitation of mentally handicapped persons. Portland, OR: Portland Habilitation Center, Inc., 1982.

Tawney, J., Knapp, D., O'Reilly, C., & Pratt, S. Programmed environment curriculum. Columbus, OH: Charles Merrill, 1979.

Thomas, M. A. Developing skills in the severely and profoundly handicapped. Reston, VA: Council for Exceptional Children.

Thomas, M. A. Hey, don't forget about me. Reston, VA: Council for Exceptional Children, 1976.

Thornton, S. M. & Frankenburg, W. K. (Eds.). Child health care communications: Enhancing interactions among professionals, parents, and children. Johnson and Johnson Baby Products, 1983.

Zigler, E. & Balla, D. Mental retardation: The developmental-difference controversy. Hillsdale, NJ: Lawrence Erlbaum Associates, 1982.

Appendix D
Newspaper Articles

An exercise in reality

By CRAIG STEDMAN
Sun Correspondent

ACTON - At one end of the McCarthy-Towne School cafeteria, a young girl was trying to make her way through a maze of chairs, aided not by her eyes but by a walking stick. "It's hard," she admitted.

At the other end, a boy was walking with a weight attached to one of his ankles. He said that it felt "strange."

These weren't handicapped children learning how to cope with their disabilities, however. They were children without disabilities learning what it's like to have them.

Their "teachers" were a group of 15 McCarthy-Towne sixth-graders who volunteer their time once a week to work with special needs students taught at the school under the aegis of the Concord Area Special Education (CASE) collaborative.

The sixth-graders designed, set up and manned seven different display areas in the school cafeteria last week. Included were displays on physical and learning disabilities, visual impairments and speech impediments.

Students could try out a wheelchair, attempt to dial a number on a touch-tone telephone while wearing large mittens, or learn what it feels like to read braille.

They could also try to balance a paper cup and plate in one hand while hopping and pushing a walker with their other hand, or to spread peanut butter and jelly on a cracker with their fingers taped together.

And in one corner of the cafeteria, they could watch videotapes of a special-needs class being taught at the school.

The idea behind the demonstration was to make students more aware of how it feels to go through life with a disability, according to Nancy Kolb, a teacher at the school who works with the special-needs students.

"The sixth-graders wanted to try to get the students in the other grades to understand what it's like to be handicapped," she said. "They had observed that the other students didn't really know how to interact with the special needs students."

Students' conception

Teachers and administrators of the CASE program at the school came up with the idea of having a demonstration, but it was primarily the sixth-graders' show.

"We helped them set up and gave them the idea, but the sixth-graders have really taken over,"

Learning to walk

Kerri Connell, a third-grader at McCarthy-Towne School in Acton, learns how it feels to walk with a handicap, guided by grade six student Jenny Swift. (Sun photo by Richard Hunt)

for Acton students

said Ellen Horvitz, who is working with the CASE program through Tufts University's Project CoNect. "We're letting them do everything."

This is the second year that McCarthy-Towne sixth-graders have been volunteering under a joint Project CoNect/CASE program designed to integrate special-needs students into the regular life of the school as quickly as possible.

The two organizations relied solely on teachers during the first year of their project, which is being funded by a grant from the federal Department of Education, but Horvitz said that "just didn't work."

So they turned to the sixth-graders at the school, and what they found, according to Horvitz, is that children are sometimes better teachers than adults.

The sixth-graders work with the special-needs students once a week for 45 minutes, and they also attend weekly sessions where they learn sign language, study handicaps and, Horvitz said, "generally talk about feelings a lot."

The demonstration, the first at McCarthy-Towne, was for third- through fifth-grade students only, but another group of volunteers is scheduled to put one together for the younger students in April.

Horvitz said Project CoNect and CASE officials may try to involve the other elementary schools in Acton in that second demonstration, and she added that they also might eventually try to bring the demonstrations to other CASE communities.

Horvitz is convinced that the demonstrations will eventually help children who participate in them to understand what life is like for persons with disabilities.

"Even though the third- and fourth-graders may not realize the seriousness of what they're seeing now, maybe they'll remember a little of it later on," she said.

She's also optimistic about the future of the sixth-grade volunteer program at McCarthy-Towne, even though the grant funding Project CoNect's involvement with CASE expires after this year.

First-hand experience

guided by sixth-grader Nicole Guttenberg. The sixth grade sponsored a program on awareness of physical handicaps at the school last week.

Jennifer Sittelle, a third-grade student at Acton's McCarthy-Towne School, experiences wheelchair confinement,

Agenda Item #21

Students respond to peers' special needs

By BENJAMIN HOROWITZ
Sun Staff

ACTON – Students who don't need special education courses would seem unlikely to volunteer for a special education class.

But at the McCarthy-Towne School here, 25 mainstream sixth graders are more-than-willing participants, tutoring younger special needs pupils in a variety of living and thinking skills.

"I like it a lot," says sixth grader Karen Chamberlain, who just started her second 12-week stint as a volunteer instructor. "I like to work with kids. I enjoy helping them learn, and seeing them improve."

Karen, of Cowdrey Lane, works particularly closely with Cindy Reichenberg, a special needs student with severe eyesight problems.

Karen helps Cindy put together puzzles, match shapes, and complete other exercises to aid her in thinking logically and to make use of the sight she has.

For Karen, the program is her "favorite thing" in school. She likes it so much, in fact, that she is planning a career as a special education teacher.

The program at McCarthy-Towne is taught by two Concord Area Special Education (CASE) collaborative teachers, Donna Marcotte and Debbie Goessling, who are assigned to the elementary school.

The federally-funded program, known as Project CoNect (Collaborative Network for early childhood training), is supervised in Massachusetts by Tufts University's Department of Child Study.

At McCarthy-Towne, sixth graders volunteered on an informal basis last year, which began the three-year Department of Education grant providing in-service training to four area spe-

Acton

cial needs programs in Massachusetts.

This year, the student-tutors became an integral part of the classes. Their primary role is to reinforce lessons the children have learned from teachers.

Why was this unusual program started at McCarthy-Towne, and not some other school?

Ellen Horvitz, Tufts' project coordinator for CoNect, credits the school's principal, Parker Damon.

"He is developing an understanding of the handicapped," she says. "He's trying to educate other people."

"A lot of principals aren't positive about special needs classrooms in their buildings," Horvitz reports.

"Often, they put special needs kids in the basement, and nobody sees them. Here they're side by side with the other kids. Hopefully, this (McCarthy-Towne) will become state-of-the-art more than the basement classroom."

Says Damon, "It's good for kids that don't have special needs to see that the world is made up of a variety of people. Too often in suburbia, it's just one kind of person that kids come in contact with."

When the tutors develop good feelings about the special students, "It makes it spread through the kid grapevine," Damon notes. And some of those who hear about the program may choose to get involved.

John Cuccaro, 11, decided to volunteer "because other kids were doing it and they said they liked it. It was very moving."

"I'm having a lot of fun, getting to know all the kids," John adds.

John has aided special education students in such tasks as sorting crayons for different colors, helping them to walk better, and showing them how to take off and put on sweaters, shoes, and socks.

As for the special needs pupils, they like being tutored by people close to their own age, the teachers say.

The young volunteers become excited and animated when their charges succeed. "They say wow, awesome!" Goessling notes. Their feelings tend to rub off on the students.

The sixth graders "have terrific insights," Goessling adds. "They might word things differently from a professional adult, but they have a good understanding of these kids."

Besides offering their services for 45 minutes a week, eight of the volunteers attend weekly supervisory classes taught by Marcotte and second-grade teacher Janet Nezda.

In these sessions, the teachers and students talk about each special needs child's situation in what amounts to "a seminar in special ed," Marcotte says.

Students served in the program are ages 5 though 9, and suffer "moderate to severe" physical and mental handicaps.

The majority are expected to need special services for a number of years, with such long-term afflictions as cerebral palsy, Downs' syndrome, and in some cases basic retardation.

In small groups or through individual instruction, the classes teach the students a full range of subjects considered "a whole approach to the child," Marcotte says.

Aimed at helping the students to function more independently, the classes teach "life skills" such as washing, toilet training, brushing teeth, and dressing.

The students also learn writing, some reading, and have gym and music classes, in addition to putting together puzzles, matching shapes, and completing other exercises to develop hand-eye coordination and logical thinking.

Each class has one teacher, two full-time aides, and two sixth graders to instruct 10 students.

Supervising Joshua Towery while he puts together a puzzle, 11-year-old volunteer Melissa Potter explains: "I gave him a candy when he was done. Then he put together a chain, and I gave him another candy."

Melissa says she became involved because "I thought it would be fun."

"I like working with younger kids," notes Melissa, who occasionally is paid for her services when she babysits.

Beth Slusser, another sixth grader, "just felt like" volunteering for the program "cause I like kids a lot."

"I used to babysit a lot," she adds.

Beth, working with Goessling's more severely-impaired group, helps the students put on and take off shirts, jackets, and hats.

Is the program at McCarthy-Towne unique?

"I don't know of anybody who's doing exactly what we're doing," Horvitz says."

Karen Chamberlain helps Cindy Reichenberg.

Arenta Item #4 D

Elementary students, special r

By Paul McCue

ACTON — Over a period of time, it is believed that understanding gained by a small group of sixth grade volunteers can spread through the school in the mysterious way that fads and slang words do, but a grammar lesson does not.

The first year of an "understanding handicaps" program is drawing to a close at the McCarthy-Towne School. Teachers and administrators hope the benefits of the unique program will reach beyond the special needs students now enrolled there and the sixth graders who volunteer to work with them.

The main thrust of the program is to help elementary school students learn about and feel more comfortable with people that have physical and mental handicaps.

Donna Marcotte and Debbie Goessling teach 15 special needs students, ages five to nine, in the Concord Area Special Education (C.A.S.E.) Collaborative located in the elementary school.

About 16 sixth graders volunteer to work with the handicapped children for close to an hour one day a week, every day but Thursday, early release day. A different group participates in the program about every three months.

Some students have been involved in the program for the entire year. Several have gone outside the classroom and worked with the parents of the exceptional children.

The goal of the program was to have the experience of these sixth graders "filter down" through the entire school body, Marcotte explains.

When a sixth grade class passes a group of C.A.S.E. groupin the corridor of McCarthy-Towne, those who worked with Marcotte and Goessling say hello and call the special needs students they know by name, evoking a smile and greeting from the younger children.

"That's a good role model for the third or fourth graders," says Goessling.

Marcotte explained that the other sixth graders and students in other grades will see this and "figure it must be o.k." to be nice to the special needs students.

Parker Damon, principal of the McCarthy-Towne school, also says he believes there is "a lot greater sensitivity on the part of both students and teachers in the school" toward the special education children.

There is "not only an appreciation of the differences but an appreciation of the sameness" and the "basic needs and feelings" of the exceptional children, Damon says.

Marcotte also says the sixth graders are perhaps better spokespeople than the teachers for telling other classes about the special education program.

When they to talked to first and third grade classes about the special education program, "the sixth graders knew all the answers" to the questions they were asked, says Marcotte.

"They walked out and were surprised at how much they knew...Sometimes its better to hear (an answer) from your peers," she says.

Goessling says the sixth graders are an added attraction in the day of the special needs students.

"It's kind of a motivation for them working with the sixth graders. They like working with somebody other than us, their teachers," says Goessling.

arrival of sixth graders every day after lunch, she added.

The sixth graders also add variety to the development of language skills for the exceptional students, said Marcotte. "We might say 'good job' where as the sixth graders will say 'awesome,'" she laughed.

Marcotte and Goessling also point out that the assistance of the sixth graders has allowed them to do projects they otherwise might not have had time to do. For example, the older students teach dressing and undressing skills to the younger students.

The dressing project, like most other lessons in the curriculum for handicapped persons, is best taught on a one-to-one basis, say the teachers.

Four sixth graders can each work one-on-one with an exceptional student while the teacher and their four assistants tend to others. Speech therapist Susan Rakusin also works with the children.

Marcotte teaches the more advanced C.A.S.E. students, many of whom are at a kindergarten testing level, working on such things as printing letters. Some of these students are "mainstreamed" into the kindergarten classes for part of the day.

Goessling works with students who are at a lower level, currently learning colors and shapes.

On a recent day in Goessling's class, McCarthy-Towne students Peter McClain and Heather McDonald sat in the small chairs at a miniature table supervising the students in sorting colored blocks into an aluminum TV dinner tray.

Both the sixth graders said they had some contact with special need children before volunteering for this program. McClain had worked with handicapped children in a kindergarten class at the Peperell school he used to attend.

"I just thought it might be a good experience," said Peter, when asked why he volunteered to work in the special education program.

Heather said she knew one of the McCarthy-Towne C.A.S.E. students because they are neighbors.

Trina Coleron and Susan Synder worked in the advance class down the hallway.

"I want to learn more about these kids so when I get older... I will feel more comfortable" with handicapped people, says Susan.

"Also, these kids are really sweet...they're nice. I think they're nicer than other kids," added Trina.

Not only do the exceptional students not know they are different, but they do not know about things like hate, say Trina and Susan.

One of the favorite recess activities of the special younger students is to chase their older schoolmates on foot across the playground, they say.

Some of the sixth graders in the program have chosen to participate in weekly supervision classes in which Marcotte and Goessling explain various handicaps affecting the young students and different techniques of teaching special education students.

The supervision classes provide a setting for the sixth graders to ask questions.

Because the exceptional students constantly need close supervision, Marcotte and Goessling said they usually don't have time to explain to the volunteers their handicaps and how they should respond. The sixth graders can also be reluctant to ask questions in the presence of the special needs students, they added.

"The sixth graders would have a question and

needs kids in unique program

In the McCarthy-Towne elementary school special education classroom, (l to r) Megan Hurley, Kelly Walsh, Debbie Goessling, teacher; Mila Rautiainen and Peter Walsh, sixth grade students.

(Staff photo by Bill Bridgeford)

teacher or parents couldn't answer," Marcotte says.

Some of the handicaps of the C.A.S.E students are Cerebal Palsy, Down's Syndrome, vision and behavior problems.

The supervision classes this year have included lessons on basic sign language. None of the exceptional students is deaf, but sign language helps in teaching and communicating with those that have poor expressive skills, explained Marcotte.

Ellen Horvitz, a professor at the Tufts University Eliot-Pearson Department of Child Study, participates in two supervision sessions a month. The University has also sent guest lecturers who are experts in various fields of special education to the sessions.

The McCarthy-Towne program is partially funded by a grant from Tuft's Project CoNECT (Collaborative Network for Early Childhood Training). According to Marcotte, McCarthy-Towne has enough funds to maintain the program for at least one more year.

Project CoNECT personnel are currently evaluating questionnaires filled out by all 75 sixth graders before the program started this year and again later in the year. The researchers are examining the questionnaires to see if there have been changes in the children's feelings and attitudes toward handicaps.

The program started last year in an unstructured format on a trial basis. Children in the school have worked with the special education students in less formal program for several years, according to Principal Damon.

It is the "seminar component," or the supervision sessions, which makes the program unique this year.

Marcotte says the program has had the cooperation of the sixth grade teachers and the students have proved to be responsible volunteers, arranging for substitutes when they cannot come.

After several weeks of coming to the classes, the sixth graders are asked to make a commitment. Only a couple of students have dropped out after a short while, and they too have benefitted from their introduction to the program, Marcotte feels.

Appendix E
Workshop Handouts

ACTIVE STIMULATION MANUAL

Division I

The Walter E. Fernald State School

L. Morrow/5-83

Active Stimulation

Active Stimulation is the name given to a system of switches and devices used to deliver consequences. Active Stimulation was designed especially for multihandicapped persons to modify their behavior. The switches are built to meet their needs and allow them to turn off or on, or to control devices, toys and appliances that they could not normally operate independently.

There are many uses for active stimulation in practice. Some of these are;

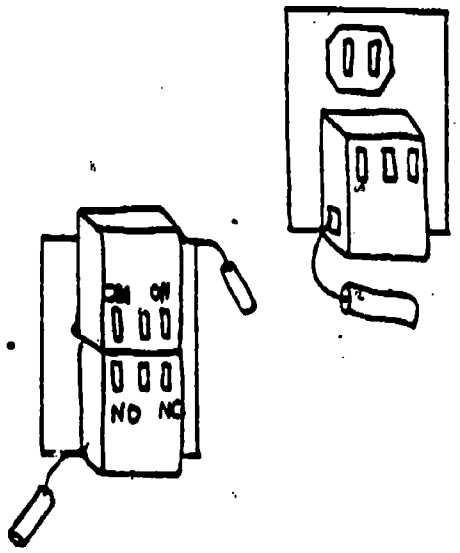
- Control of environment
- Teach or improve grasp, reach, tracking and gross motor skills
- Indicate choice
- Leisure time activities
- Gives immediate consequence (reinforcer)
- Awareness of cause and effect

Active Stimulation Devices (ASD) can be part of a person's environment or just part of a classroom setting. Its applications are extensive. It involves three basic pieces of equipment: The consequence (usually a toy or appliance), the hand switch (which the client will manipulate) and the Control Unit (can also be a computer or a relay switch) which connects the hand switch and the client's movement with the consequence.

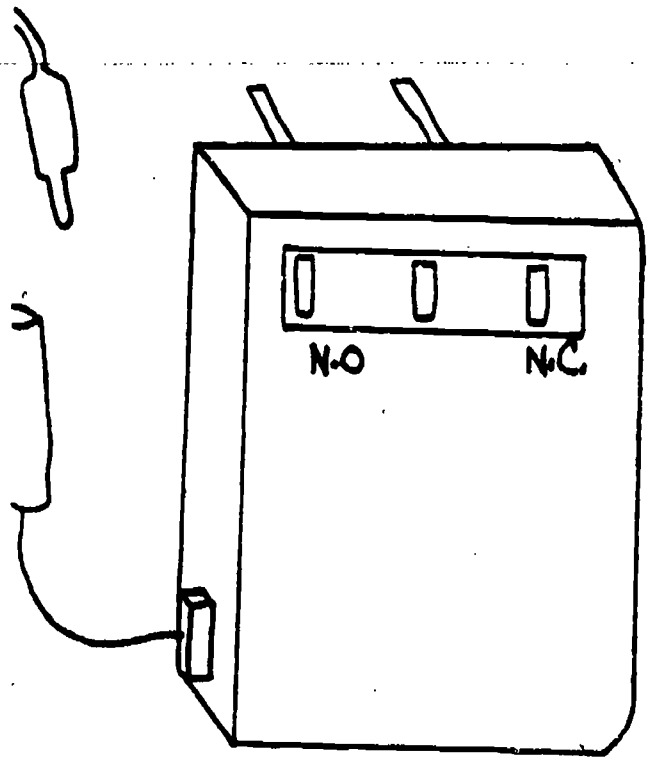
The Relay Switch

The relay switch plugs into the wall and connects the hand switch, which the resident will use, and the toy or appliance. The toy/appliance is not plugged into the wall. It is plugged into the relay switch. The relay switch is then plugged into the wall. When the hand switch is then connected to it, the toy/appliance will work only when the hand switch is activated.

Its normal position is this.....



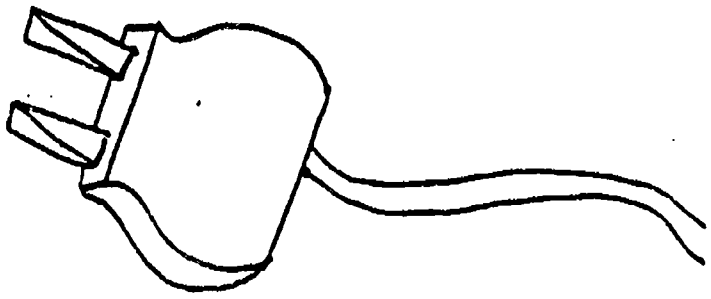
If you use two, they will look like this.....



The appliance plug goes into the slots on the front of the relay switch.

*If you use the slots above the letters "N.O." the toy/appliance will go on when the switch is activated.

*If you use the slots above the "N.C." the toy/appliance will stay on until you activate the switch, then it will shu off.



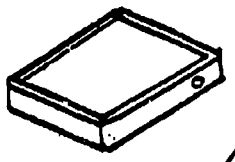
The Hand Switch

The resident uses the hand switch to control the toy/appliance. There are several at Fernald but many more types can be made.

GRASP switch

The resident must squeeze this

PANEL switch



The resident must push this or tap this

MERCURY switch

The resident must move their head, or arm or leg (wherever attached)

BARREL switch

The resident must rotate thi

PRESSURE Pad switch

The resident must press this

The Extension Cord

Some switches, not all, need this extension cord in order to have them fit into the relay. One end is plugged into the switch, the other into the relay. The mercury switch does <u>not</u> need the extension. The white-tip adapter can also be placed at the other end to help the switch plug into other devices.

The Toy/Appliance

The purpose of active stimulation is to have control over the toy/appliance. It is necessary to find interesting and stimulating toys or appliances so that the resident will be motivated to use the switches.

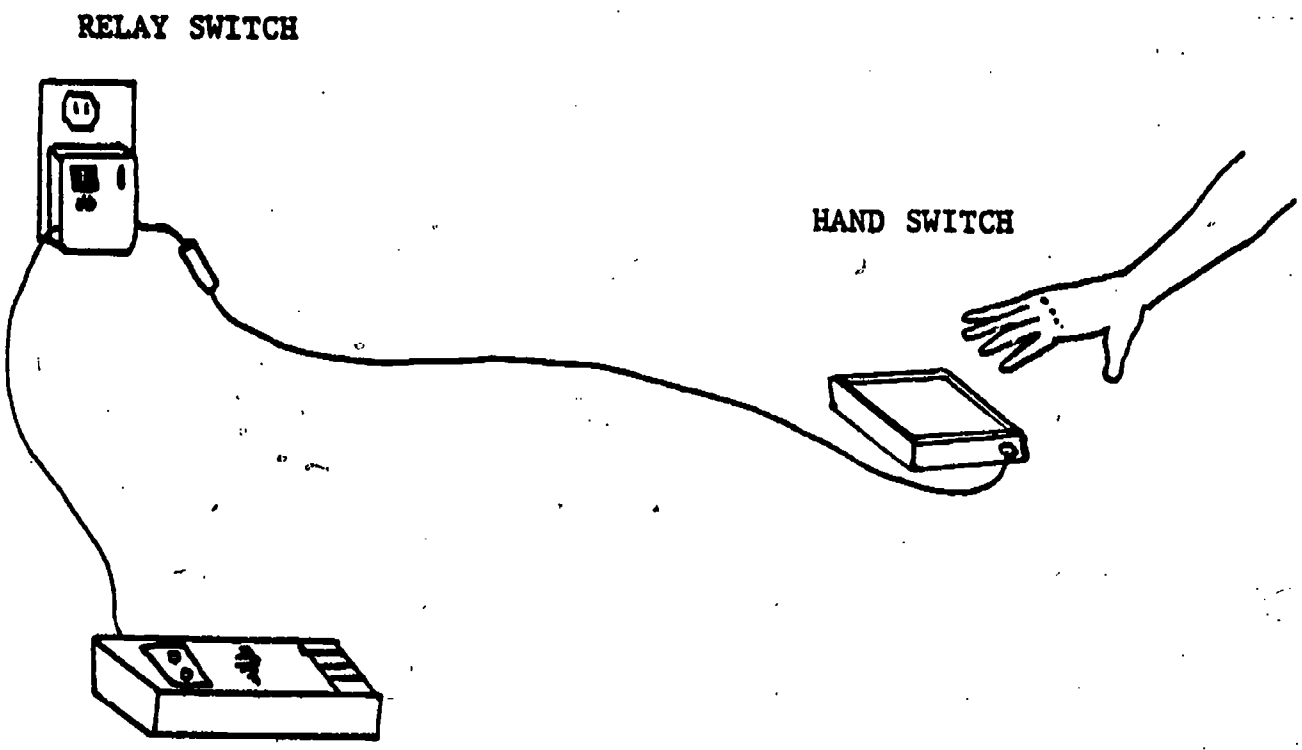
Some appliances that can be connected are:

- Television
- Tape recorders
- Flashing lights
- Fans
- Vibrators
- Concertmate

Many battery-operated toys can be adapted so they easily hook up to active stimulation switches. These toys can be very colorful and stimulating.

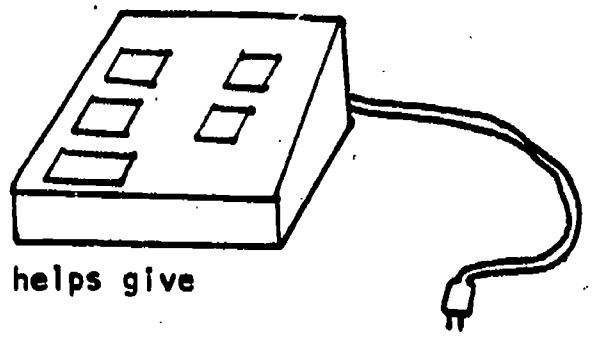
The Completed System

Simple relay and hand-switch



Be sure to put toy/appliance in "play" or "on" position. The toy/appliance will then be activated when hand switch is used.

The Control Unit



The Control Unit can take the place of the relay switch. It is like a relay switch in that it helps give the resident control over the toy/appliance but it has many more functions that will help the resident learn more and learn at a faster rate.

The relay switch is very simple. The toy/appliance stays on/off for as long as resident operates the switch. For example, if they place their hand on the push panel the toy/appliance will stay on until they remove it. This does not necessarily reinforce their behavior. The resident could leave their hand on indefinitely and not realize that the appliance is working because they operated the switch. Sometimes it is difficult to know if a resident understands the causal relationship between their movement and the consequence.

A good way to prevent this would be to have the toy/appliance shut off after a certain period of time, perhaps a few seconds. If the resident desired to have it turned back on, they would have to activate the switch again. Or, if they are just learning the relationship between their movement and the consequence they will probably understand it better when everytime they made that movement, a definite, measurable event took place. This also requires the resident to participate actively in keeping the device on. It is a good way to measure their understanding of the causal relationship and their preference of consequences.

With the Control Unit it is possible to control these factors in a variety of ways. The Control Unit can

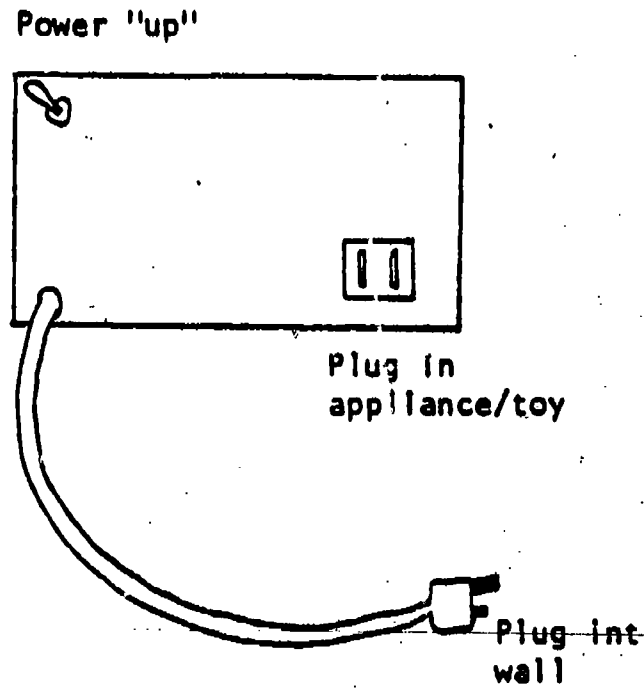
1. Determine the number of responses the resident must make before receiving the consequence
2. Control the length of time the resident must operate the switch and how long to device stays on/off.
3. Count the number of responses and reverse the switch

Back

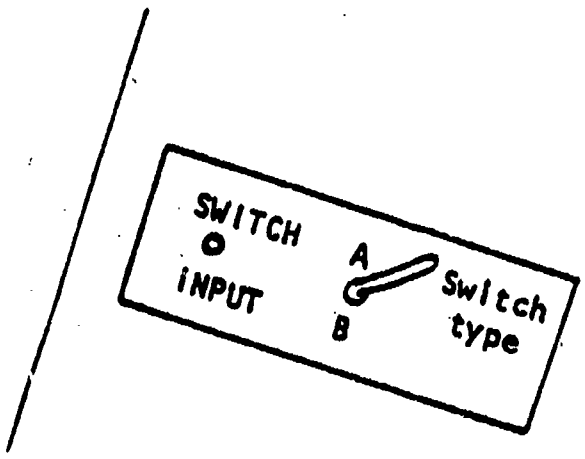
Plug appliance/toy into the back of the Control Unit

Plug Control Unit into wall

Push power stick up



Front



Plug hand switch into "Switch Input"

(Note: In some cases the extension cord won't fit into the "switch input" unless you use the white-tip adapter)

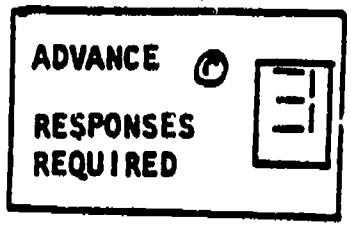
The "Switch Input" can be on either "A" or "B". Which one you select depends on your purpose. "A" or "B" lets you use the switch to either turn on or off the toy/appliance.

Example: When on "A", the toy shuts off when you use the switch. When on "B" the toy turns on when the switch is used.

Using either one depends on what other selections you have made on the front panel.

Front Panel of Control Unit

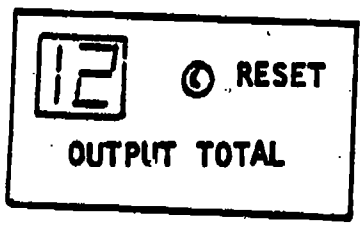
Functions:



Press the black button to the desired number. The number equals the number of times plus one the resident must manipulate the switch before the toy/appliance is activated.

Example: When blank, the resident must use the switch just once and the tpy goes on.

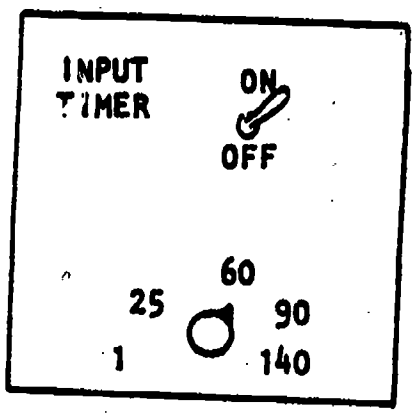
When on "1" the resident must use the switch twice, etc.



Output Total

This automatically records the number of responses the resident makes. Press the button to reset to "0".

Example: Resident presses the push panel five times. The number "5" appears in the panel.

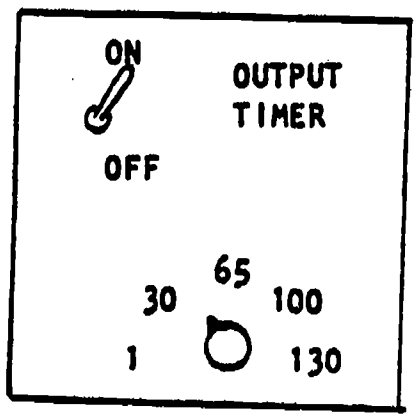


Input Timer

This controls the amount of time the resident must maintain the switch in operation before the toy/appli will be activated. Turn the dial to determine the time

Example: The resident squeezes the grasp switch for 25 seconds (the dial is set to 25). The appliance goes on.

When off this function does not work.



Output Timer

This controls the amount of time the toy/appliance wi stay on after having been activated by the resident. Set the dial to the amount of time desired.

Example: The resident pushes the push panel and rele it. The toy stays on for the set time, whi is 10 seconds. Then it turns off. The resi pushes the panel and leaves their hand on t The toy shuts off after 10 seconds.

When off this function does not work.

The following lists possible combinations of functions on the Control Unit:
(These are written for a grasp switch but are applicable to any)

I means Input Timer
O means Output Timer

A is the switch in one direction
B is the reverse function of A

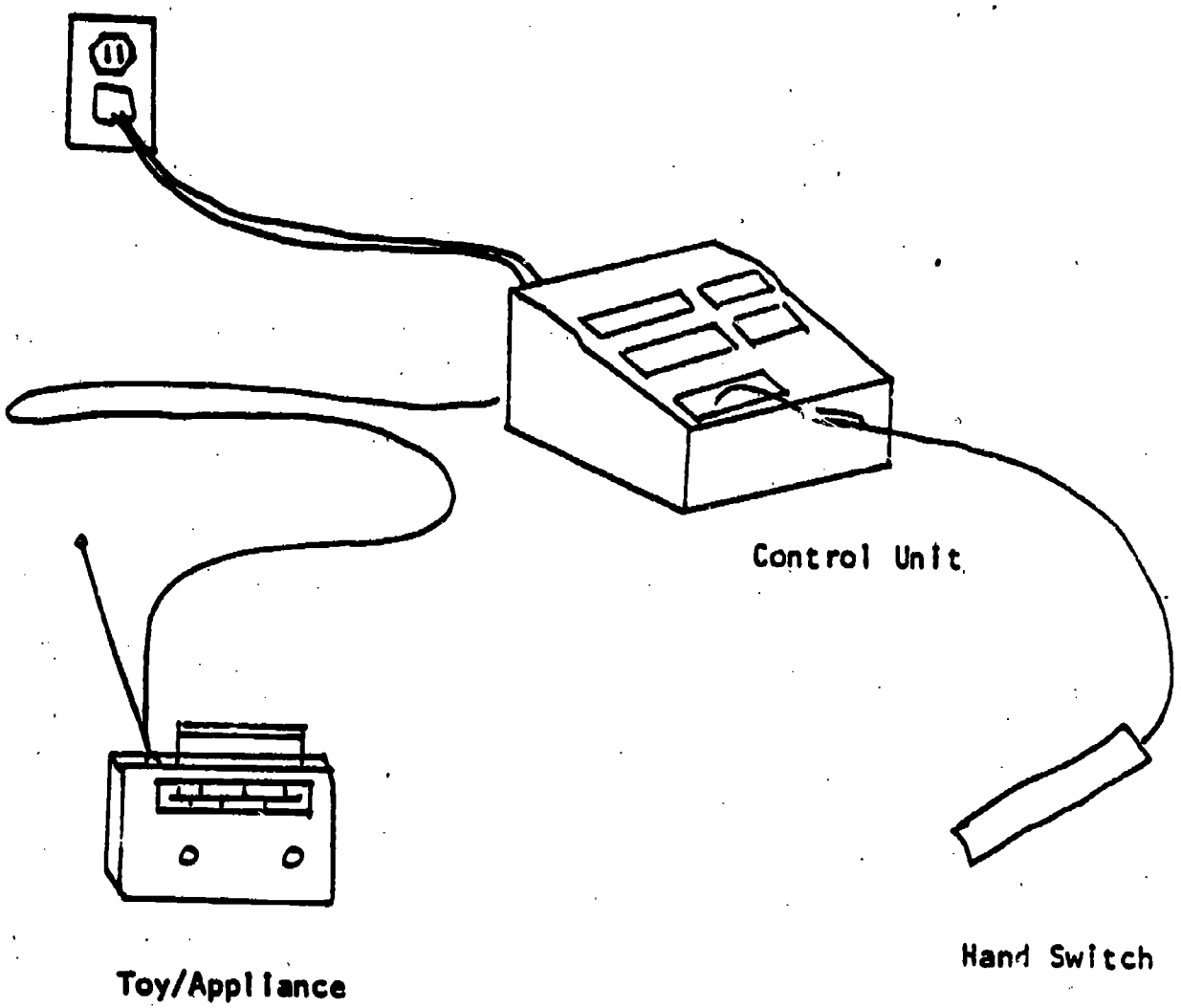
I off, O off
A: grasping the switch keeps the device off, releasing it turns it on.
B: grasping the switch holds the device on, releasing it turns it off.

I on, O off
A: grasping and releasing turns the device on after a delay (you set the I Timer). It will stay on until you grasp and releas again.
B: grasp the switch until the devise goes on (set I Timer). It will go off when the grasp is released.

I off, O on
A: grasping and releasing turns the device off for "X" seconds (set O Timer)
B: grasping the switch (and either maintainimg grasp or letting go) turns device on for "X" seconds.

I on, O on
A: grasping and releasing turns the device on after "Y" seconds (I Timer) for "X' seconds(O Timer).
B: grasp the switch for "Y" seconds (I Timer) and it will go on then shut off after "X" seconds.

The Completed System II



The Mercury Switch

Presently, the mercury switch can be attached to the tape recorder

Concertmate

Control unit

The mercury switch can be used to turn on/off appliances/toys by body movement. It can be attached to arms, legs and the head. When the switch is tilted in one direction it will turn the toy/appliance off; when tilted in the other direction it will turn it on.

Example

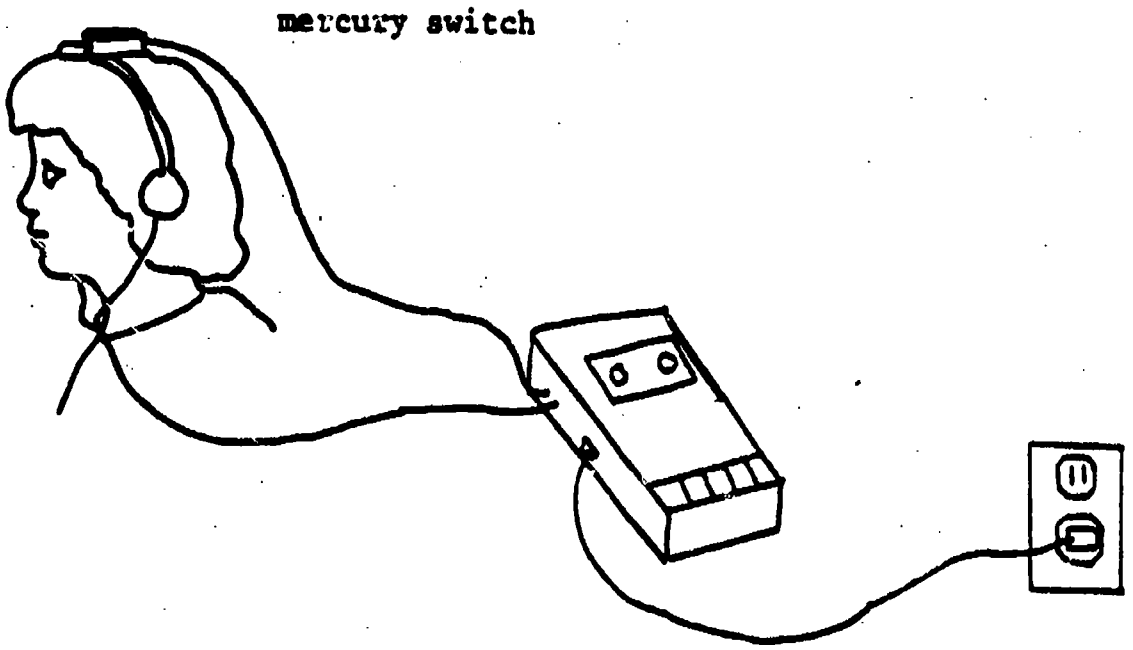
Attach the switch to headphones.

Plug headphones into appliance/toy (where it says "ear")

Plug mercury switch cord into appliance (where it says "REM" for remote control)

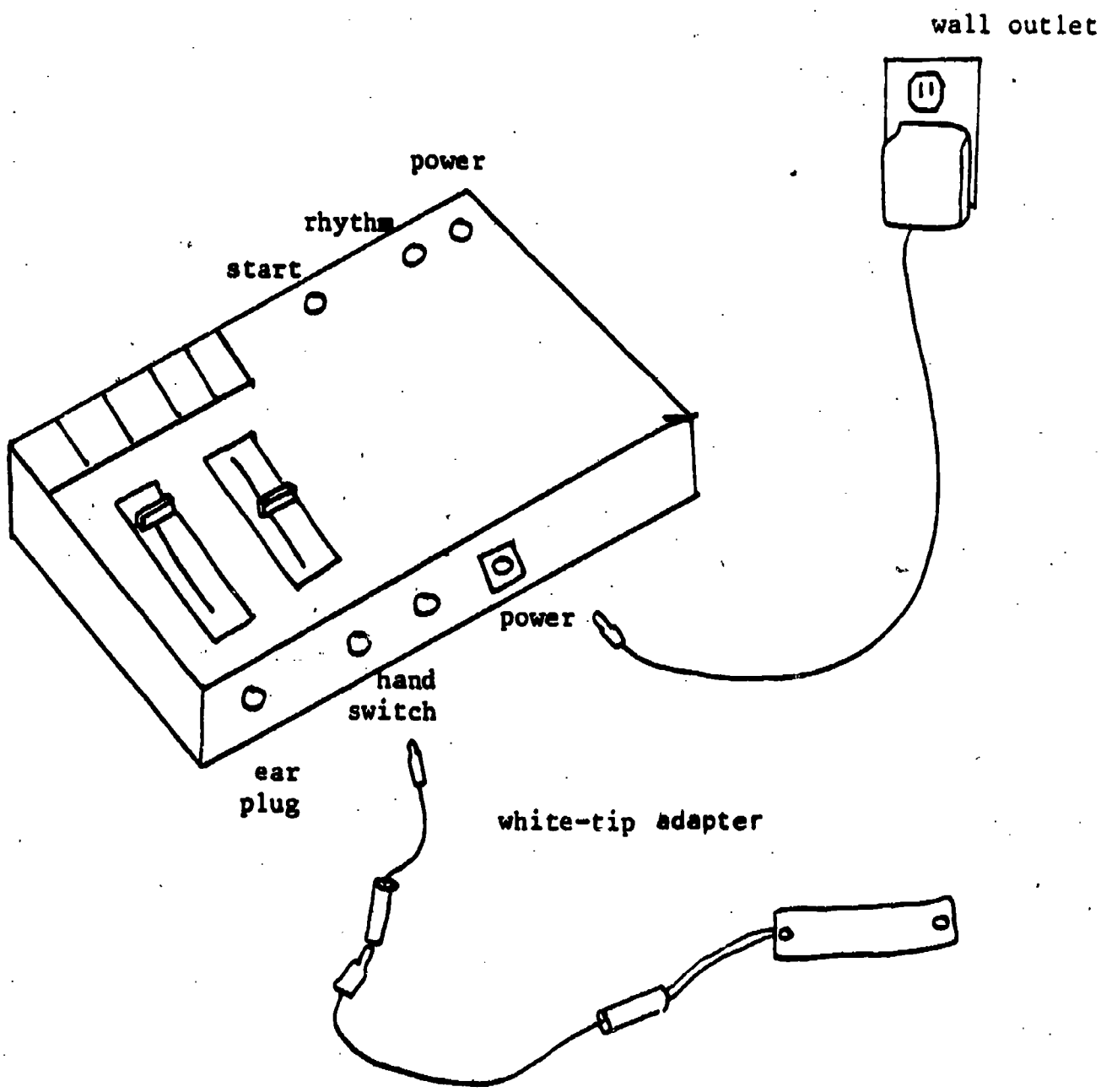
Plug appliance into wall (not relay switch)

Completed:



Put appliance "on". When resident lifts head up, appliance will turn on.

The Concertmate



The Concertmate has its own adapter and does not need the relay switch.

Use the white-tip adapter in order to plug in the hand switch.

Be sure the power, rhythm, start and selector buttons are down.

Be sure the volume is up.

Headphones may be used; plug them into the ear plug.

With Control Unit: Plug adapter into back, white-tip adapter and hand switch into front.

How to Order:

SEND CHECK, MONEY ORDER, OR PURCHASE ORDER TO:

Linda J. Burkhart
8503 Rhode Island Ave.
College Park, MD 20740

NOTE: If you are ordering just books, they will be sent fourth class book rate.
For first class or U.P.S. delivery, Please add $1.50 per book.
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ADDITIONAL COPIES OF THIS FLYER ARE AVAILABLE UPON REQUEST. PLEASE STATE QUANTITY NEEDED, OR SEND ADDRESSES. THANK YOU!

prices and specifications subject to change without notice

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PLEASE PRINT

NAME

STREET

CITY STATE ZIP

ITEM	QTY.	PRICE	TOTAL
Pressure Switch		$24.50	
Head Control Switch		16.95	
Head Switch Kit		9.50	
Toy Adapter: D cell		6.95	
C cell		6.95	
AA cell		6.95	
9 volt		7.95	
Any 4 Adapters		24.95	
Potty Training Switch		42.50	
Extension wire		4.75	
First Book		6.00	
Second Book		12.50	
MD residents add 5% sales tax			
TOTAL			

Hawaii, Alaska and Canada, Please add $2.00

ITEM ORDERED	Number ordered		=

Subtotal

Price List

I. TOYS		Mfgr.	Adapted Toy
Music Box Radio		FP# 794	$30 00
Music Box Record Player		FP# 995	$35 00
Music Box Television		FP# 114	$35 00
Music Box Tick Tock Clock		FP# 998	$35 00
Carousel Record Player	Discontinued by Fisher Price	FP# 170	$40 00
Music Box Mobile		FP# 175	$40 00
Mickey Mouse Music Box			$35 00
Pound Around		CG	$30 00
Busy Box		SK	$95 00
Roller Coaster		WD	$28 00
Jack-in-the-Box		MAT	$30 00
Snoopy & Woodstock House		MAT	$30 00
Big Bird		CG	$30 00
Musical Smurf		CG	$30 00
Bugs Bunny			$30 00
Bear in Box		TONKA	$35 00
Radio			
AM only			$15.00
AM/FM			$30.00
Tape Recorder			$50.00
Barking Puppy			$22.00
Panda Cart			$25 00
Drumming Bear			$22 00
Kitten-in-Basket			$22.00
Van			$22 00
Fire Engine			$22 00
Radio Controlled Jet	Discontinued		$50.00
Toy Train			$60 00
Drum			$30.00

NOT LISTED IN CATALOGUE:

Sudsy Circus	Discontinued	MAT	$25.00
Muppets Drum			$30.00
Geoffrey Family Animated TV			$25.00
Smurf Musical Color TV			$30 00
Smurf Musical Clock			$25 00
Dolly Toy Touch and Play Mobile			$45.00

Manufacturer Code:
FP-Fisher Price; RS-Radio Shack; CG-Child Guidance; SK-Steven Kanor; MAT-Mattel; WD-Walt Disney, TONKA-Tonka.

II. COMMUNICATION DEVICES		Price
Signal Buzzer 3" x 5"		$ 22.00
5" x 8"		$ 26.00
8" x 13"		$ 35.00
Compartmentalized Communicator with Sounds:		
2 Compartment		$ 65.00
3 Compartment		$ 75.00
4 Compartment		$ 85.00
5 Compartment		$ 95.00
Compartmentalized Communicator with Sounds and Lights:		
2 Compartment		$ 75.00
3 Compartment		$ 85.00
4 Compartment		$ 95.00
5 Compartment		$110.00
Compartmentalized Communicator with separate ON/OFF Switches, Add:		$8.00 per compartment
Clock Communicator		$ 65.00
Sequential Scanner:		
2 Compartment		$ 55.00
4 Compartment		$ 85.00
III. BIOFEEDBACK		
Posture Buzzer		$ 20.00
IV. SWITCHES		
Plate Switch	3" x 5"	$ 15.00
	5" x 8"	$ 18.00
	8" x 13"	$ 22.00
Rocking Plate Switch		$ 30.00
Dual Plate Switch	3" x 5"	$ 30.00/pr.
	5" x 8"	$ 36.00/pr.
	8" x 13"	$ 44.00/pr.
Leaf Switch		$ 25.00
Mercury Switch		$ 15.00
Sip and Puff Switch		$ 45.00
Eye Blink Switch		$200.00
Button Switch		$ 15.00
EMG Switch		$400.00
Plate Switch on Stand		$ 30.00
Wobble Switch		$130.00
Joystick (4 Switches)		$ 75.00
Tongue Switch		$ 65.00
Photocell Switch		$ 75.00
Voice Activated Switch		$ 75.00
Pinch Switch		$ 20.00
Adapter for other commercial switches		$ 10.00

Order Form

ITEM ORDERED	Number ordered	@	=

Continue on other side if necessary

Subtotal

ORDERING INFORMATION

Shipping & Handling: Add $2.50 for each item ordered.

Payment: All orders must be submitted with a check.

Make checks payable to:

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101 Lefurgy Avenue, Hastings-on-Hudson, NY 10706
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NOTE: Prices subject to change in subsequent catalogues. Our equipment is subject to design modifications when we can improve the quality of our product.

No returns accepted without our prior written approval. Risk of loss or damage in transit is assumed by buyer who shall claim against carrier. All claims must be made in writing within 5 days after receipt of goods by certified mail or telegram. All goods not so contested shall be conclusively deemed as ordered. Buyer agrees to pay full amount of invoice according to the terms.

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Address _____

City _____ State _____ Zip _____

Check for $_____ enclosed.

SUBTOTAL _____

Shipping and Handling _____

GRAND TOTAL _____

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OCTOBER 1, 1983

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Title Position

School/Organization

Street Address

City State Zip

Total for products ordered $

Add state and local taxes if applicable $

shipping & handling costs of $ 10.00

Amount of check enclosed $

Total number of items ordered

		INPUT DEVICES		
A100		PUSH PANEL SWITCH	35.00	
A200		GRASP HANDLE SWITCH	20.00	
A300		TILT SINGLE DIRECTIONAL SWITCH	15.00	
A400		PNEUMATIC SWITCH (MIN. FORCE)	30.00	
A500		PNEUMATIC SWITCH (LOW FORCE)	15.00	
		PERIPHERALS		
C100		MOTORIZED TOY (CHIRPING BIRD)	12.00	
		COMMUNICATION LINES (6 FEET LONG)		
D100		1/4" PHONE PLUG TO 1/4" PHONE PLUG	5.00	
D200		1/4" PHONE PLUG TO 1/8" PHONE PLUG	5.00	
D300		1/4" PHONE PLUG TO 3/32" PHONE PLUG	8.00	
D400		1/4" PHONE PLUG TO 2 PIN PLUG	8.00	
D500		1/4" PHONE PLUG TO SPADE CONNECTOR	5.00	
D600		1/4" PHONE PLUG TO 2 SIDE PRINTED CIRCUIT BD.	8.00	
		POWER SUPPLIES		
E100		ISOLATION RELAY	18.00	
		JUNCTION BOXES		
F100		AND/OR GATE	20.00	
		ACCESSORIES		
G100		AIR BELLOWS	15.00	

Adaptive Aids Price List, April, 1981

Item No.	Product Description	Each	
101	Control Unit	~~100.00~~	125.00
102	Pressure Pad Switch	9.00	
103	Wrist/Arm/Leg Switch	9.00	
104	Mercury Head Switch	12.00	
105	Squeeze Switch	15.00	
106	Ring Stack	50.00	
107	Radio Head Set Switch	30.00	
108	Communication Board	~~[illegible]~~	500.00
109	Advanced Squeeze Switch	25.00	

With the exception of the radio head set switch, all other Adaptive Aids require The Control Unit!

Order Form

Ship to: *(check one)*

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☐ School/Institution/Company _____

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Address _____

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NOTE: All orders must be accompanied by check, money order or purchase order.

Please Check One:
- ☐ Check
- ☐ Money Order
- ☐ P.O.

Quantity	Item No.	Product Description	Price per unit	Total

Please allow 8 weeks for delivery
Please make Check/Money Order / Purchase Order payable to

ADAPTIVE AIDS
P.O. Box 13178
Tucson, AZ 85732
DDD

Merchandise Total	
Sales Tax (unless exempt)	
Shipping Charges Add 10%	
Total	

Edmond S. Zuromski, Ph.D.
President
Handicapped Childrens Technological Services

Dr. Zuromski originally developed the Active Stimulation Program model which is now being widely used in the U.S. and Canada.

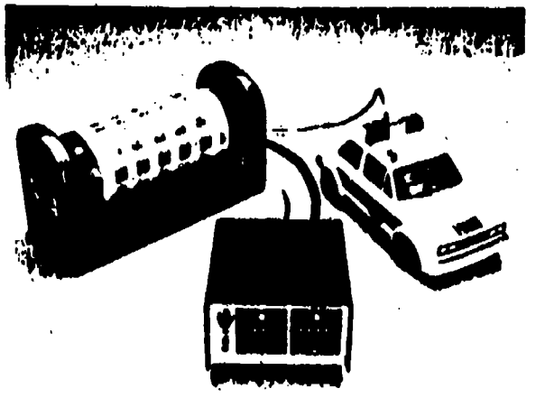
He spent 7 years directly applying ASP devices in the classroom and is currently developing uses of these devices with a wide variety of multihandicapped populations including children and adults.

He has trained more than 5,000 North American professionals, parents, administrators and others on the use of the ASP model.

ASP Training is now available

HCTS is currently promoting workshops, in services and consultation to many school departments, private agencies and state departments of education in the United States and Canada. If you are interested in sponsoring an ASP workshop, please contact us for more information.

Active stimulation devices for handicapped children and adults.



HCTS Box 7 Foster RI 02825

Teaching skills from basic motor movements to precommunication.

give handicapped children and adults the chance to gain independence and control over their environment.

Severely handicapped persons can take advantage of the learning technology available from Handicapped Childrens Technological Services through Active Stimulation devices developed and proven effective in classrooms for over 10 years.

These innovative devices allow for control over the environment. More importantly, they may be used in conjunction with the ASP curriculum to shape and teach behaviors ranging from basic motor movements to precommunicative skills. The ASP stresses the principle of positive reinforcement for desired movement. The use of sensory reinforcers underlies the success of this approach with multihandicapped persons.

How Active Stimulation works:

A basic Active Stimulation System includes:

1. Tilt Switch (77-2)
2. Control Lead (77-3)
3. Timer (81-1)

This system allows severely handicapped persons, regardless of age, to control battery operated devices like toys, tape recorders and games, or electrical appliances (using our Accessory Relay FRE 103.)

Typically, the person grasps the Tilt Switch or it is taped into the hand. The switch senses movement and triggers the 81-1 Timer which, in turn, operates a device for a pre-set period of time. To reproduce the event, the movement must be repeated.

Once the initial movement is obtained, there are an infinite number of skills which can be taught using ASP devices.

Active Stimulation Systems provide handicapped people with:

- Greater independence and control over their environment
- Increased physical skills and mobility
- Pride and self confidence from seeing real progress

Active Stimulation Equipment

Active Stimulation Programmer™

Designed for use by teachers, parents and others serving severely handicapped persons, the programmer provides timed intervals of stimulation and with its built-in counters, has the capacity to record the number of movements and reinforcements, e.g. times the recorder comes on [illegible] be activated by our Tilt, Panel or other switches. The unit controls a battery or electrically operated device for preset periods of time. Data from the counters can be plotted for a permanent record of performance.

It features variable timing intervals from one second to 90 seconds, a reverse feature where a switch release produces timed stimulation, e.g. hand relaxation, a latch function which "automatically shapes" desired behaviors like increased duration of head in midline, etc. $200.

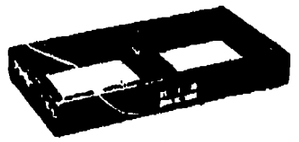
Tilt Switch 77-2
Enclosed mercury switch with five foot cable. Mini plug at one end, switch at the other. $25.

Grasp Switch
Cylindrical switch (12.5 x 2.50 cm) activated by grasp pressure (approx. 6 oz.) five foot lead. $28.

Barrel Switch
Large, rotating cylinder (18 x 8.25 cm) mounted on wooden base. Microswitch is cam operated. Five foot lead. $28.

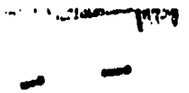
Single Push Panel
Clear plexiglass panel (19 x 20 cm) mounted on wooden base. Four microswitches insure activation with light touch. Five foot lead. (C-clamps for mounting not included). $40.

Double Push Panel
Two clear plexiglass (19 x 20 cm) panels mounted on wooden base. Includes eight microswitches. Five foot lead. $75.

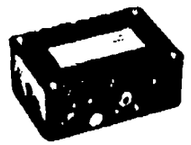


Touch Sensitive Joy Stick Control
Multidirectional touch-sensitive switch with five foot lead. $45.

Developmental Lever Control
Hardboard panel for vertical mounting (43 x 23 cm) with center mounted speaker flanked by two protruding levers. Five foot leads. C-clamps for mounting not included. $55.



Timer 81-1
Includes two control relays for controlling two low power devices. Features variable timing intervals and latch and reverse functions. $65.



Counter 81-2 (used with Timer 81-1)
Includes two resettable counters. One for responses and the other for reinforcements. Self contained power supply operates on 115 v.a.c. $80.

Control Lead 77-3
A six foot cable to connect ASP Timers to a standard cassette tape recorder. $5.

Jumper Cable (81-1 to Counter) $5.

Motorized Toy
A car, ambulance, dog, etc. $20.

Deluxe Toy
A musical animal, etc. $40.

Accessory relay (FRE 103) for AC devices. $20.

Note: prices subject to change without notice.

Order Form

Please send me...

Number	Description	Unit cost	Total cost

Shipping & handling extra Order total

Name _____ Title _____

Organization _____

Address _____

City _____ State _____ Zip _____

Telephone ( ) _____

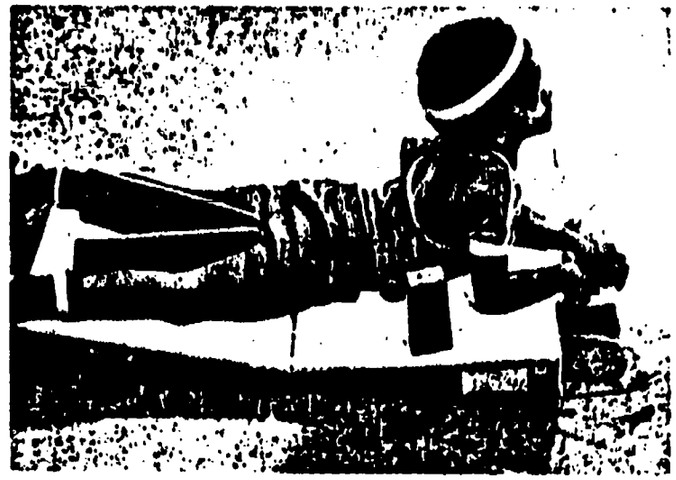
Mail payment or purchase order to:
HCTS, Box 7, Foster, RI 02825
Allow six weeks for delivery

Please send more information on the Active Stimulation training program

DYS FOR SPECIAL CHILDREN
ven Kanor, Ph.D.
101 Lefurgy Avenue
Hastings-on-Hudson, NY 10706

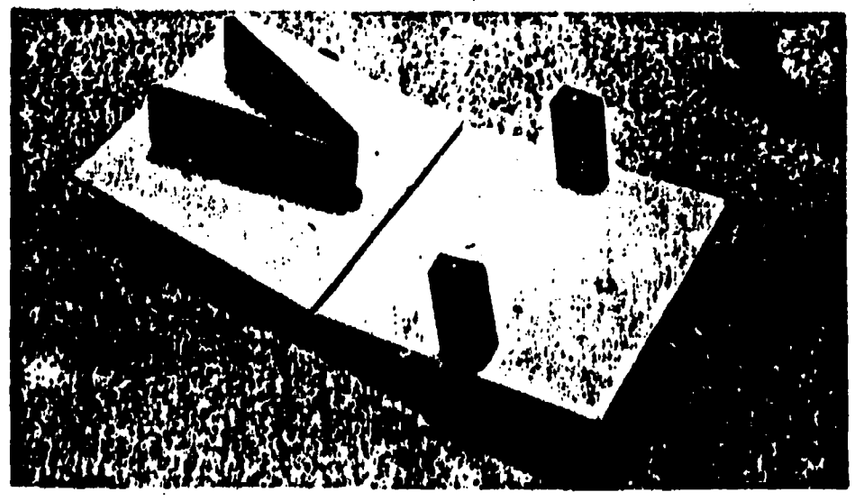
UPDATE

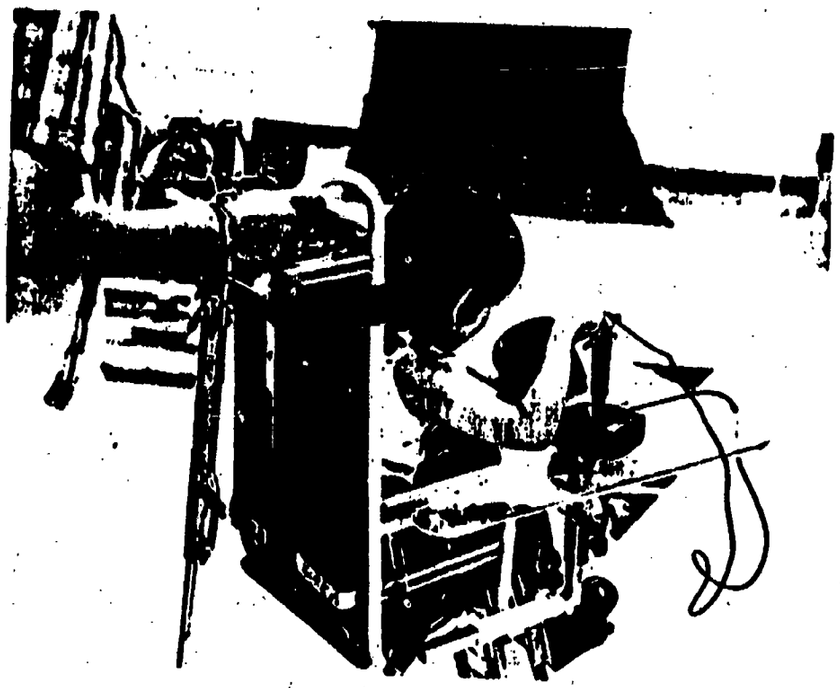
Toys for Special Childre



Motorized Scooter Board

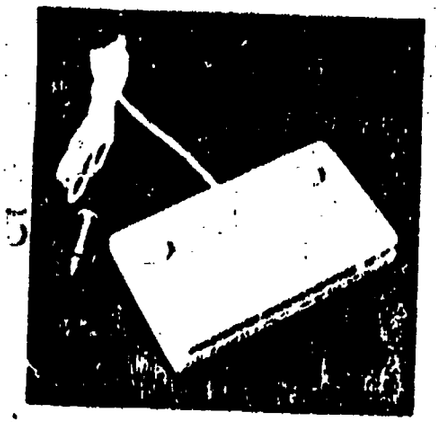
Switch closure makes the board go slowly in a circle. The control jack accepts a variety of switches, including a simple touch plate and combinations of posture (mercury) and simultaneously pressed dual plate switches. The appropriate switch is determined by the therapeutic needs of the child. For children who cannot move independently, the scooter board provides the opportunity to: control their bodies in space, learn to stop at obstacles, and reinforce learning of cause and effect relationships. The scooter board has unique posturing mechanisms including an adjustable wedge and abduction piece. The board can be flattened so that seats and other inserts can be placed on the platform. This adaptability permits use with a variety of braces (parapodium, long-leg, etc.).





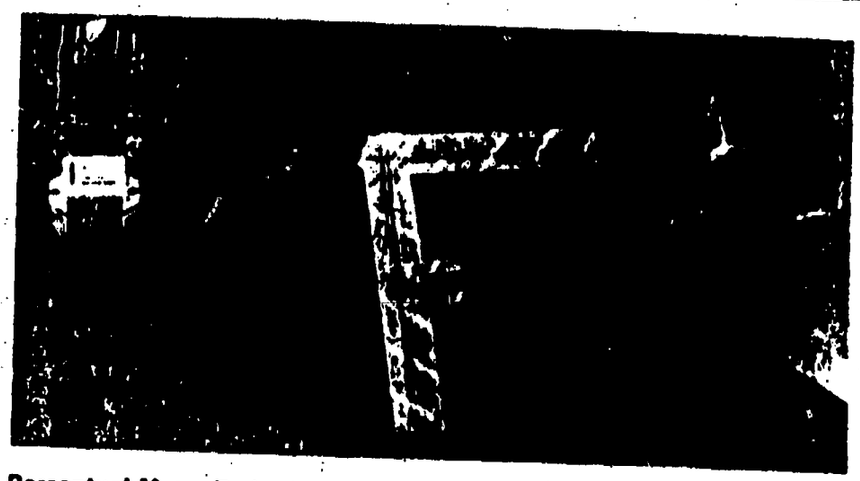
Motorized Wheelchair Trainer

Before purchasing a motorized wheelchair, it is useful to ascertain the client's perceptual motor skills. This display responds with *lights* and *sounds* to the direction of the joystick manipulation. Additionally, it has a scanning mode which accepts a variety of switch closures. The trainer stands behind the client who is seated in a conventional wheelchair. By watching the indicator on the lap tray, the trainer can push the wheelchair in the direction indicated by the client. The device helps in determining whether a motorized chair is feasible for the client, and, if it is, provides a useful tool for pretraining.



Vibrating Plate Switch

Switch plate contains a vibrator which is activated simultaneously with the device connected to its plug. The vibro-tactile input reinforces awareness of switch activation and encourages the child to learn causal relationships. It is particularly effective with low-functioning and young children.



Perceptual Motor Trainer

A design taped to this plate creates a pathway which trains eye-hand coordination. When the child's pen strays off the path, a buzzer sounds—thus reinforcing motor learning with auditory cue. The teacher/therapist can create any design for the child to follow. Designs can be as simple as a straight line or as complex as alphabet letters and words.

Order Form

	Price	Number Ordered	=
Motorized scooter board	$300.00		
Motorized wheelchair trainer	$300.00		
Vibrating plate switch	$ 35.00		
Perceptual motor trainer	$ 35.00		

Subtotal _____

Shipping & Handling* _____

TOTAL _____

***Shipping & Handling:** For motorized scooter board, add $15. For other items, add $2.50.

Payment: All orders must be submitted with a check.

Make checks payable to:

STEVEN KANOR, Ph.D., 101 Lefurgy Avenue, Hastings-on-Hudson, NY 10706 (914) 478-0960

No returns accepted without our prior written approval. Risk of loss or damage in transit is assumed by buyer who shall claim against carrier. All claims must be made in writing within 5 days after receipt of goods by certified mail or telegram. All goods not so contested shall be conclusively deemed as ordered. Buyer agrees to pay full amount of invoice according to the terms.

Name _____

Address _____

City _____ State _____ Zip _____

Check for $ _____ enclosed

MEMO

TO: Members of Division Active Stimulation Group, et al

FROM: Carl Binder (Chairperson pro tem)

RE: Issues discussed at meeting of 82 09 29

DATE: 82 10 06

At our first meeting we discussed both general and specific issues that we intend to address as a working group over the coming months. The following is a list and expansion on that set of issues.

1. Implications, purpose, and goals of active stimulation. The term "active stimulation" refers to the use of portable reinforcement programming apparatus to increase the behavior of severely and profoundly handicapped people. An out growth of basic laboratory learning research, active stimulation has grown into a national movement over the last five years or so, largely as a result of work by Dr. Edmund Zuromski of the Educational Technology Center in Warwick, R.I. As we have all learned in our work with very low functioning and multiply handicapped clients, it is difficult, even impossible in some cases, to define responses accurately enough or to deliver reinforcing consequences precisely enough to increase those few rudimentary behaviors that such clients are capable of emitting with any degree of voluntary control. However, the application of basic operant conditioning procedures with relatively simple devices has allowed professionals in various disciplines to create automated "environments" that react consistently to their clients' responding, thereby allowing them to gain an increased degree of control over both physical and social aspects of their environment that were previously completely beyond their control.

   The term "active stimulation" was coined to distinguish this approach from the more traditional passive "sensory stimulation" that was used with this level of client for years. Although it may begin with very simple adaptive switches and simple reinforcement contingencies (e.g., a fan or tape recorded music comes on and stays on as long as the client continues to squeeze a switch), the long-term implications of active stimulation work are far more dramatic. If we can place simple parts of the environment under clients' control by providing them with adaptive switches, we may be able to move toward the development of simple communication systems (e.g., yes/no or "Please come here"), adaptive transport systems or at least controllable electric beds, and more sophisticated liesure activities (e.g., choice of several reinforcers through a multiple switch arrangement). Ultimately we may be able to teach relatively complex discriminations and prosthetized skill performances one we have established an indicator response. Perhaps the simplest way of discussing active stimulation is to consider it as prosthetic or adaptive equipment that takes the principles of learning into account and takes advantage of microelectonics.

4. Preparation and Planning Time. It has become clear, with the acceleration of day programs, that very few professionals have any time for creative thinking or planning. Everyone at or meeting agreed that, first, the active stimulation work is of the highest priority but, second, that they simply don't have much time for any really creative program development. This may be a general consideration, not specific to active stimulation. But in the case of active stimulation the problem is even more intense because the equipment and problems are new to most involved.

5. Measurement and Recording. Most agreed that we need to develop better ways of obtaining quantitative data on effectiveness so we can evaluate specific changes in individuals' active stimulation programs/equipment. There are simple methods of reversal design assessment that I (Carl) can provide. And there is a need to build counters and timers into the equipment whenever possible. This tpic will be a high priority for future meetings.

6. Consequence testing/selection. Our lowest functioning clients are often characterized by a paucity of apparent reinforcing stimuli (outside their bodies). We need to acquire a larger selection of potential reinforcers (e.g., chair vibrators, heating pads, more varied sounds, etc). We also need to apply the data system to systematic testing of these with specific clients with the objective of discovering as large a selection of functional reinforcers as possible for each client. Perhaps the major failing in current active stimulation efforts (as in other programming efforts) is the use of consequences without any method of determining whether they are actually behavior accelerators (i.e., reinforcers). This must be a major focus, creatively and methodologically.

7. More professional discipline staff. Our group is rather varried as it is, but we need to attract at least one RPT, as well as one or more people from the Watertown 766 program.

8. Staff Training. We need to train ourselves better, and then we need to train direct care staff so that they really understand the purpose and operation of active stimulation equipment. It should be an educative approach to interactions with clients, not just a novel time-filler.

9. Management and Coordination. It is obvious that we need someone to coordinate and help keep these efforts on track. It is complex, both because of the technology and because of the many settings and clients involved. Our meetings will help to do this, and I can continue to chair them for a while. But when I become only a half-time supervisor, I simply won't have time to do all that is required.

10. Communication. We need to communicate with others within the

Agenda Item #21

14 THE SUN, Lowell, Mass., Monday, February 14, 1983

Students respond to peers' special needs

By BENJAMIN HOROWITZ
Sun Staff

ACTON – Students who don't need special education courses would seem unlikely to volunteer for a special education class.

But at the McCarthy-Towne School here, 25 mainstream sixth graders are more-than-willing participants, tutoring younger special needs pupils in a variety of living and thinking skills.

"I like it a lot," says sixth grader Karen Chamberlain, who just started her second 12-week stint as a volunteer instructor. "I like to work with kids. I enjoy helping them learn, and seeing them improve."

Karen, of Cowdrey Lane, works particularly closely with Cindy Reichenberg, a special needs student with severe eyesight problems.

Karen helps Cindy put together puzzles, match shapes, and complete other exercises to aid her in thinking logically and to make use of the sight she has.

For Karen, the program is her "favorite thing" in school. She likes it so much, in fact, that she is planning a career as a special education teacher.

The program at McCarthy-Towne is taught by two Concord Area Special Education (CASE) collaborative teachers, Donna Marcotte and Debbie Goessling, who are assigned to the elementary school.

The federally-funded program, known as Project CoNect (Collaborative Network for early childhood training), is supervised in Massachusetts by Tufts University's Department of Child Study.

At McCarthy-Towne, sixth graders volunteered on an informal basis last year, which began the three-year Department of Education grant providing in-service training to four area spe-

Acton

cial needs programs in Massachusetts.

This year, the student-tutors became an integral part of the classes. Their primary role is to reinforce lessons the children have learned from teachers.

Why was this unusual program started at McCarthy-Towne, and not some other school?

Ellen Horvitz, Tufts' project coordinator for CoNect, credits the school's principal, Parker Damon.

"He is developing an understanding of the handicapped," she says. "He's trying to educate other people."

"A lot of principals aren't positive about special needs classrooms in their buildings," Horvitz reports.

"Often, they put special needs kids in the basement, and nobody sees them. Here they're side by side with the other kids. Hopefully, this (McCarthy-Towne) will become state-of-the-art more than the basement classroom."

Says Damon, "It's good for kids that don't have special needs to see that the world is made up of a variety of people. Too often in suburbia, it's just one kind of person that kids come in contact with."

When the tutors develop good feelings about the special students, "It makes it spread through the kid grapevine," Damon notes. And some of those who hear about the program may choose to get involved.

John Cuccaro, 11, decided to volunteer "because other kids were doing it and they said they liked it. It was very moving."

"I'm having a lot of fun, getting to know all the kids," John adds.

John has aided special education students in such tasks as sorting crayons for different colors, helping them to walk better, and showing them how to take off and put on sweaters, shoes, and socks.

As for the special needs pupils, they like being tutored by people close to their own age, the teachers say.

The young volunteers become excited and animated when their charges succeed. "They say, wow, awesome!" Goessling notes. Their feelings tend to rub off on the students.

The sixth graders "have terrific insights," Goessling adds. "They might word things differently from a professional adult, but they have a good understanding of these kids."

Besides offering their services for 45 minutes a week, eight of the volunteers attend weekly supervisory classes taught by Marcotte and second-grade teacher Janet Nezda.

In these sessions, the teachers and students talk about each special needs child's situation in what amounts to "a seminar in special ed," Marcotte says.

Students served in the program are ages 5 though 9, and suffer "moderate to severe" physical and mental handicaps.

The majority are expected to need special services for a number of years, with such long-term afflictions as cerebral palsy, Downs' syndrome, and in some cases basic retardation.

In small groups or through individual instruction, the classes teach the students a full range of subjects considered "a whole approach to the child," Marcotte says.

Aimed at helping the students to function more independently, the classes teach "life skills" such as washing, toilet training, brushing teeth, and dressing.

The students also learn writing, some reading, and have gym and music classes, in addition to putting together puzzles, matching shapes, and completing other exercises to develop hand-eye coordination and logical thinking.

Each class has one teacher, two full-time aides, and two sixth graders to instruct 10 students.

Supervising Joshua Towery while he puts together a puzzle, 11-year-old volunteer Melissa Potter explains: "I gave him a candy when he was done. Then he put together a chain, and I gave him another candy."

Melissa says she became involved because "I thought it would be fun."

"I like working with younger kids," notes Melissa, who occasionally is paid for her services when she babysits.

Beth Slusser, another sixth grader, "just felt like" volunteering for the program "cause I like kids a lot."

"I used to babysit a lot," she adds.

Beth, working with Goessling's more severely-impaired group, helps the students put on and take off shirts, jackets, and hats.

Is the program at McCarthy-Towne unique?

"I don't know of anybody who's doing exactly what we're doing," Horvitz says."

Karen Chamberlain helps Cindy Reichenberg.

Elementary students, special

By Paul McCue

ACTON — Over a period of time, it is believed that understanding gained by a small group of sixth grade volunteers can spread through the school in the mysterious way that fads and slang words do, but a grammar lesson does not.

The first year of an "understanding handicaps" program is drawing to a close at the McCarthy-Towne School. Teachers and administrators hope the benefits of the unique program will reach beyond the special needs students now enrolled there and the sixth graders who volunteer to work with them.

The main thrust of the program is to help elementary school students learn about and feel more comfortable with people that have physical and mental handicaps.

Donna Marcotte and Debbie Goessling teach 15 special needs students, ages five to nine, in the Concord Area Special Education (C.A.S.E.) Collaborative located in the elementary school.

About 16 sixth graders volunteer to work with the handicapped children for close to an hour one day a week, every day but Thursday, early release day. A different group participates in the program about every three months.

Some students have been involved in the program for the entire year. Several have gone outside the classroom and worked with the parents of the exceptional children.

The goal of the program was to have the experience of these sixth graders "filter down" through the entire school body, Marcotte explains.

When a sixth grade class passes a group of C.A.S.E. groupin the corridor of McCarthy-Towne, those who worked with Marcotte and Goessling say hello and call the special needs students they know by name, evoking a smile and greeting from the younger children.

"That's a good role model for the third or fourth graders," says Goessling.

Marcotte explained that the other sixth graders and students in other grades will see this and "figure it must be o.k." to be nice to the special needs students.

Parker Damon, principal of the McCarthy-Towne school, also says he believes there is "a lot greater sensitivity on the part of both students and teachers in the school" toward the special education children.

There is "not only an appreciation of the differences but an appreciation of the sameness" and the "basic needs and feelings" of the exceptional children, Damon says.

Marcotte also says the sixth graders are perhaps better spokespeople than the teachers for telling other classes about the special education program.

When they to talked to first and third grade classes about the special education program "the sixth graders knew all the answers" to the questions they were asked, says Marcotte.

"They walked out and were surprised at how much they knew...Sometimes its better to hear (an answer) from your peers," she says.

Goessling says the sixth graders are an added attraction in the day of the special needs students.

"It's kind of a motivation for them working with the sixth graders. They like working with somebody other than us, their teachers," says Goessling.

arrival of sixth graders every day after lunch, she added.

The sixth graders also add variety to the development of language skills for the exceptional students, said Marcotte. "We might say 'good job' where as the sixth graders will say 'awesome,'" she laughed.

Marcotte and Goessling also point out that the assistance of the sixth graders has allowed them to do projects they otherwise might not have had time to do. For example, the older students teach dressing and undressing skills to the younger students.

The dressing project, like most other lessons in the curriculum for handicapped persons, is best taught on a one-to-one basis, say the teachers.

Four sixth graders can each work one-on-one with an exceptional student while the teacher and their four assistants tend to others. Speech therapist Susan Rakusin also works with the children.

Marcotte teaches the more advanced C.A.S.E. students, many of whom are at a kindergarten testing level, working on such things as printing letters. Some of these students are "mainstreamed" into the kindergarten classes for part of the day.

Goessling works with students who are at a lower level, currently learning colors and shapes.

On a recent day in Goessling's class, McCarthy-Towne students Peter McClain and Heather McDonald sat in the small chairs at a miniature table supervising the students in sorting colored blocks into an aluminum TV dinner tray.

Both the sixth graders said they had some contact with special need children before volunteering for this program. McClain had worked with handicapped children in a kindergarten class at the Pepperell school he used to attend.

"I just thought it might be a good experience," said Peter, when asked why he volunteered to work in the special education program.

Heather said she knew one of the McCarthy-Towne C.A.S.E. students because they are neighbors.

Trina Coleron and Susan Synder worked in the advance class down the hallway.

"I want to learn more about these kids so when I get older... I will feel more comfortable" with handicapped people, says Susan.

"Also, these kids are really sweet...they're nice. I think they're nicer than other kids," added Trina.

Not only do the exceptional students not know they are different, but they do not know about things like hate, say Trina and Susan.

One of the favorite recess activities of the special younger students is to chase their older schoolmates on foot across the playground, they say.

Some of the sixth graders in the program have chosen to participate in weekly supervision classes in which Marcotte and Goessling explain various handicaps affecting the young students and different techniques of teaching special education students.

The supervision classes provide a setting for the sixth graders to ask questions.

Because the exceptional students constantly need close supervision, Marcotte and Goessling said they usually don't have time to explain to the volunteers their handicaps and how they should respond. The sixth graders can also be reluctant to ask questions in the presence of the special needs students, they added.

"The sixth graders would have a question and

needs kids in unique program

In the McCarthy-Towne elementary school special education classroom, (l to r) Megan Hurley, Kelly Walsh, Debbie Goessling, teacher; Mila Rautiainen and Peter Walsh, sixth grade students.

(Staff photo by Bill Bridgeford)

teacher or parents couldn't answer," Marcotte says.

Some of the handicaps of the C.A.S.E students are Cerebal Palsy, Down's Syndrome, vision and behavior problems.

The supervision classes this year have included lessons on basic sign language. None of the exceptional students is deaf, but sign language helps in teaching and communicating with those that have poor expressive skills, explained Marcotte.

Ellen Horvitz, a professor at the Tufts University Eliot-Pearson Department of Child Study, participates in two supervision sessions a month. The University has also sent guest lecturers who are experts in various fields of special education to the sessions.

The McCarthy-Towne program is partially funded by a grant from Tuft's Project CoNECT (Collaborative Network for Early Childhood Training). According to Marcotte, McCarthy-Towne has enough funds to maintain the program for at least one more year.

Project CoNECT personnel are currently evaluating questionnaires filled out by all 75 sixth graders before the program started this year and again later in the year. The researchers are examining the questionnaires to see if there have been changes in the children's feelings and attitudes toward handicaps.

The program started last year in an unstructured format on a trial basis. Children in the school have worked with the special education students in less formal program for several years, according to Principal Damon.

It is the "seminar component," or the supervision sessions, which makes the program unique this year.

Marcotte says the program has had the cooperation of the sixth grade teachers and the students have proved to be responsible volunteers, arranging for substitutes when they cannot come.

After several weeks of coming to the classes, the sixth graders are asked to make a commitment. Only a couple of students have dropped out after a short while, and they too have benefitted from their introduction to the program, Marcotte feels.

Date	Your observations of activity of lesson	How you felt about lesson activity and student	Questions you would like us to answer at seminar
October 12, 1983	[illegible] to interact!	[illegible] working with [illegible]	I wonder if [illegible] with [illegible] me.
October 19, 1983	Anne was smarter than Lisa. She wanted to be independant!	Anne was fun to work with because her attention span was longer than Lisa's.	What is wrong with Anne?
October [illegible]	Lisa [illegible] a art! [illegible]	I enjoyed [illegible]	[illegible]

Becca - Lisa can be shy with new people but she seems to be comfortable with you. I think Lisa enjoys working with you. On Wednesday morning Lisa is excited when I tell her you are coming today

SYSTEMATIC TRAINING OF A

PICTURE COMMUNICATION SYSTEM FOR

SEVERELY HANDICAPPED CHILDREN

PICTURE TRAINING PROGRAM

TEACHER	STUDENT
1. Assemble list of preferred and neutral items gathered from teaching staff and parents.	
2. Present child a choice of a preferred or a neutral item. Integrate procedure through out day.	Child consistently indicates preferred item.
3. Present preferred and neutral items behind plexiglass.	Child indicates preferred item.
4. Present upright 5"X7" picture of preferred paired withthe item.	Child indicates the picture to receive the item.
5. Present upright 5"X7" pictures of the preferred and neutral items paired with the items.	Child indicates the picture of the preferred item to receive the item
6. Present the upright 5"X7" picture of the preferred item.	Child indicate the picture of the preferred item to receive the item.
7. Present the upright 5"X7" picture of the preferred item and a blank. (white paper)	Same As Above
8. Present the upright 5"X7" picture of the preferred item and a foil. (different colored paper)	Same As Above
9. Present the upright 5"X7" pictures of the preferred item and the neutral item.	Same As Above
10. Present the upright 5"X7" pictures of the preferred item, neutral item, and a foil.	Same As Above
11. Repeat training procedure with pictures lying down on a surface.	
12. Repeat training procedure using smaller pictures. (3"X5")	
13. Present picures of preferred item and 2 neutrals at two levels.	Same As Above
14. Present pictures ofpreferred item and 3 neutrals at two levels.	Same As Above

15. Present pictures of preferred item, and 4-5 neutrals at two levels.	Child indicates preferred item to receive item.
16. Begin training new pictures of preferred items.	
17. Begin offering child choices using pictures.	

PROBLEMS WITH PICTURE PROGRAM

1. Determining "preferred" items may be difficult.

2. Determining "neutral"items may be difficult.

3. The child may be unable to visually discriminate the picture of a movement, thus, limiting the use of the picture system to tangible items.

4. Some children are unable to process more than 3 - 4 choices of pictures of preferred items at a time.

5. The picture system without the training of receptive labelling offers only 1 way communication. The Child lets you know what s/he wants.

OTHER TEACHING STRATEGIES

1. Training should occur during language sessions.

2. Generalize the picture program at the skill level where consistency has been reached into appropriate situations.

3. Verbal language modelling with pictures is essential for language stimulation and eventual receptive labelling.

4. It is best to train one picture at a time. If child does not move ahead with one picture it may be because the reinforcing qualities of the "preferred" item are not consistently strong. Try another picture.

5. Once the child begins to demonstrate his/her ability to visually discriminate the picture it may not be necessary for the child to proceed through all of the steps of the program.

BIBLIOGRAPHY

Hurlbut, Bonnie. "Non-Vocal language Acquisition in Adolescence with Severe Physical Disabilities: Bliss Symbol Versus Iconic Stimulus Formats", Journal of Applied Behavior Analysis, Volume 15, NO. 2, Pages 241-258 (Summer 1982).

Lancioni, Guilio E. "Using Pictoral Representation as Communication Means with Low Functioning Children", Journal of Autism and Developmental Disorders, Volume 13, No. 1, Pages 87-105 (March 1983).

Morris, Suzanne."Communication/Interaction Development at Mealtimes for the Multi-handicapped Child: Implications for the Use of Augmentative Communication Systems." Language, Speech and Hearing Services in the Schools.Volume 12, No. 4 Pages 216-232 (October 1981).

Murphy, G.H. "Teaching a Picture Language to a Non-Speaking Retarded Boy." Behavior Research and Therapy, Volume 15, Pages 198-201 (1977).

Nielupski, John. "Teaching Auxiliary Communication Skills to Severally Handicapped Students", A.A.E.S.P.H. Review, Volume 4, No. 2, Pages 107-124 (Summer 1979).

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT CONECT Collaborative Network for Early Childhood Training

Announcing

AN INTER-COLLABORATIVE WORKSHOP

MEETING THE CLASSROOM AND PROGRAM NEEDS OF THE POST-TRAUMA CHILD

Discussion of the considerations involved in programming for children with "acquired" special needs. After a period of normal development and education, accidents, surgery or disease may create handicaps and disabilities which pose particular challenges for educators and therapists. What are these "special" special needs, and how do we address them?

Workshop Leaders

DOROTHY CASOLARO, M. Ed.
Inpatient 766 Coordinator
Kennedy Memorial Hospital for Children

and

MARGARET COYNE, M. Ed.
Classroom Teacher
Head Trauma Unit
Kennedy Memorial Hospital for Children

DATE: Wednesday, April 27, 1983
TIME: 1:30-3:30 p.m.

PLACE: Dalrymple Elementary School
Crest and Grovers Avenues. Winthrop

Hosted by Shore Collaborative and sponsored by Project CoNECT

* Sorry, there will be no opportunity to visit classrooms at this site

For directions to the Dalrymple School, Winthrop, please see reverse side.

Medford, Massachusetts 02155
617 628-5000

RESOURCE MATERIALS FOR SIBLING GROUPS

ACTIVITIES

Barnes, Berrigan and Biklin. What's the Difference? Syracuse, New York, Human Policy Press, 1978.

Bookbinder, Susan R. Mainstreaming - What Every Child Needs to Know About Disabilities. The Meeting Street Curriculum Grades 1-4, Rhode Island: The Rhode Island Easter Seal Society, 1978.

Cleary, Margaret. Helping Children Understand Children with Special Needs. Sudbury, Mass.: Sudbury Public Schools, 1975.

Fluegelman, Andrew. The New Games Book. New York: Dolphin Books/Doubleday Co., Inc., 1976.

Hendricks, G., Willis, R. The Centering Book.

Howe & Howe, Personalizing Education. Values Clarification and Beyond. New York: Hart Publishing Company, 1975.

Kids Accepted Here. Activities for the Classroom. Merrimac, Mass., The Network, The Manufactory. 01860.

People Just Like You - An Activity Guide. Committee on Youth Development.

"HANDS ON" MATERIALS

Barnes, Ellen, et. al. What's The Difference? Teaching Positive Attitudes Toward People With Disabilities Syracuse: Human Policy Press, 1978.

The Brothers and Sisters Game. Cooney, et al. Massachusetts Department of Mental Health, 1975.

"Getting Through": A Guide to Better Understanding of What Hearing Impaired People Hear. Record. 33 rpm. Zenith Radio Corp., 6501 West Grand Ave., Chicago, Ill. 60635

Individual Differences. Madison Wisconsin: Madison Public Schools, 1975.

Cymerman, S. A Curriculum of Awareness Exercises for the Classroom. Boston: Lesley College.

Mainstreaming In The Media. Books, film, some hands on items. Available through the Early Childhood Project Consultant in each education region. (includes film Mary, an 11-year-old deaf child)

"Put On A Handicap" Record. 33 rpm. Kimbo Distributors.

What if You Couldn't? Kit. Selective Education Corporation, Newton Massachusetts

"Zoom," (film - 16mm) Encyclopedia Britannica Education Corporation 425 North Michigan Ave., Chicago, Ill. Series of live-action color films designed to help students, teachers and others become acquainted with the problems of handicapped youngsters as they become integrated into normal educational settings and adjust to their social and home environments.

BOOKS FOR CHILDREN ABOUT CHILDREN WITH SPECIAL NEEDS

Brightman, Alan. Like Me? Little, Brown & Co., 1976. Ages up to 5 years. Looks into the mind of a retarded boy as he compares himself to others. Candid and expressive photographs.

Byars, Betsy. The Summer of the Swans. Viking Press, 1970. A crisis involving a mentally retarded boy increases emotional growth in his teenage sister. Winner of the Newberry Award.

Fanshawe, Elizabeth. Rachel. Bradbury, 1975. A well-written and illustrated book about Rachel, who is orthopedically impaired.

Fassier, Albert. Howie Helps Himself. Whitman & Co., 1975. A very moving account of a boy learning to move his wheelchair, and his relationship to his sister and father.

Fassler, Joan. One Little Girl. Behavioral Publications, 1969. Written for the pre-school child with an older retarded sibling.

Gold, Phyllis. Please Don't Say Hello. An autistic boy and the attempts of the neighborhood boys to befriend him.

Grollman, Sharon Hya. More Time to Grow. Boston: Beacon Press, 1973. Concerns feelings a family has toward a retarded son. Bibliography at end. Ages 10 and above.

Hirsch, Karen. My Sister. Carol Rhoda Books, 1977. A sibling talks about her retarded sister.

I am. I Can, I Will. Pittsburgh: Family Communications 1975.

Kamien, Janet. What if You Couldn't. New York: Schreibner , Sons. 1979.

Larsen, Hanne. Don't Forget Tom. New York: Crowell, 1978

Lasker, Joe. He's My Brother. Whitman, 1974. Two brothers, one neurologically impaired, are presented in this well-written, well-illustrated book.

Levine, Edna S. Lisa and Her Soundless World. Human Sciences, 1974. Ages 4-10. This book will help children understand what it means to be deaf.

Little, Jean. Take Wing. Boston: Little, Brown & Co. 1968.

Ominsky, Elaine. Jon O. A Special Boy. Englewood Cliffs, N. J. Prentice Hall, Inc. 1977.

Sobol, Harriet. My Brother Steven is Retarded. N. Y.: MacMillan, 1977.

Stein, Sara Bonmett. About Handicaps: An Open Family Book for Parents And Children Together. N. Y.: Walker & Co., 1974. A flawless presentation for adults and children about Matthew, a normal child who portrays feelings of fear and anger towards Joe, who has cerebral palsy.

Sullivan, Mary Beth, Brightman, Alan J. and Blatt, Joseph. Feeling Free. Reading, MA: Addison-Wesley, 1979. This story provides a series of in sightful stories and activities designed to increase children's understanding of disabilities.

Wolf, Bernald. Don't Feel Sorry for Paul. Philadelphia: Lippincott, 1974. Paul wears a prosthesis on his legs and one arm. He is seven, rides a horse and does many other things. Book is rather long; good pictures and family interactions.

BOOKS FOR PROFESSIONALS ABOUT SIBLINGS OF DEVELOPMENTALLY DISABLED AND HANDICAPPED CHILDREN

Adams, M.E. Siblings of the retarded: Their problems and treatment. Child Welfare. 310-316, June 1967.

Breslan, N., Weitzman M. and Messenger, K. Pschological Functioning of Siblings of Disabled Children. Pediatrics. 67 (3): 344-353, March 1981.

Caldwell, B., Guze, S. A Study of The Adjustment of Parents and Siblings of Institutionalized and Non-institutionalized Retarded Children. American Journal of Mental Deficiency. 64: 845, 1960.

Faber, B. Effects of a Severely Mentally Retarded Child on Family Integration. Monographs Society Research Child Development. 24: 1, 1959.

Farber, B. Family: Organization and Interaction. San Francisco, Chandler Publishing Company, 1964.

Featherstone, H. A Difference in the Family. New York, Basic Books, Inc., 1980.

Gath, A. The Mental Health of Siblings of Congenitally Abnormal Children. Journal of Child Psychology and Psychiatry. 13: 211-218, 1972.

Grossman, F. Brothers and Sisters of Retarded Children: An Exploratory Study. New York, Syracuse University Press, 1972.

Holt, K.S. The Influence of a Retarded Child Upon Family Limitation. Journal of Mental Deficiency Research. 2: 28, 1958.

Jordan, T.E Research on the Handicapped Child and The Family. Merrill-Palmer Quarterly. 8: 243, 1962.

Kaplan, F. and Fox, E. Siblings of The Retardate: an adolescent group experience. Community Mental Health Journal. 4 (6): 30-32, 1968.

Lavigne, J.V., Ryan, M. Psychological Adjustment of Siblings of Children With Chronic Illness. Pediatrics. 63 (4): 616-627, April 1979.

McAllister, R.J., Butler, E., Lei, TJ. Patterns of Social Interactions Among Families of Behaviorally Retarded Children. Journal of Marriage and Family. 35: 63, 1973.

McCollum, A. Coping with Prolonged Health Impairment in Your Child. Boston, Little, Brown and Company. 1975.

Murphy, A., Pueschel, S., Duffy, T. and Brady, E. Meeting with Brothers and Sisters of Children with Down's Syndrome. Children Today. 20-23, March-April 1976.

Sibling Information Network - national newsletter

The School of Education
Department of Educational Psychology
Bos U-6
University of Conneticut
Storrs, CT 06268

Poznanski, E. Psychiatric Difficulties in Siblings of Handicapped Children. Clinical Pediatrics. 8 (4): 232-234, April 1969.

Schonell, F.J., Watts, B.H. A First Survey of The Effects of a Subnormal Child on the Family Unit. American Journal of Mental Deficiency. 61: 210, 1957.

Schreiber, M. Forgotten Children. The Exceptional Parent. 23-27, August 1975.

Schreiber, M., Feeley, M. Siblings of the Retarded: A Guided Group Experience. Children. 12 (6) 221-225, November-December 1965.

Siblings of Children with Disabilities - A Case History. The Exceptional Parent. 29-32, December 1979.

Trevino, F. Siblings of Handicapped Children: Identifying Those At Risk. Social Casework. 488-493, October 1979.

THE ELIOT-PEARSON DEPARTMENT OF CHILD STUDY AND THE INSTITUTE FOR APPLIED CHILD DEVELOPMENT

PROJECT COllaborative Network for Early Childhood Training

TUFTS UNIVERSITY

FAMILIES UNDER STRESS

COPING WITH THE PRESSURES ON OUR PARTNERSHIP WITH PARENTS

Wednesday, May 12, 1982
1:00-3:00 p.m.
Refreshments served

Oak Hill School
130 Wheeler Road
Newton, Mass.

A workshop to explore how professionals in special education are coping with the ever increasing stress experienced by the families whose children we are committed to teaching. Unemployment, marital separation, social service cutbacks....few families are unaffected. Families with a special needs child may be even more vulnerable. How are we addressing these needs of our special families?

Resource Panelists:

Katherine Bove, R.N.
Nurse Coordinator, Center for Genetic Consulting and Birth Defect Evaluation, New England Medical Center

Kathleen Camara, Ph.D.
Director, Children and Family Change Study, Tufts University

Donald Wertlieb, Ph.D.
Co-Director, Project CoNECT

Participants:

Professional and paraprofessional staff of Project CoNECT Special Education Collaboratives: C.A.S.E., EdCo, North Shore Consortium and Shore

* *

Administrators' Forum

Judith Medalia, Director of the EdCo Brookline-Newton Preschool Program, invites program administrators to an informal discussion prior to the workshop, 12:00-1:00. Bring your lunch and meet your counterparts in other collaboratives.

* * * *

Observation Exchange

Collaborative staffs may arrange to observe the EdCo Preschool Program in the morning prior to the workshop. If interested, please contact Kathleen Donnellan at Project CoNECT, 381-3355.

R.S.V.P. to your Project CoNECT liaison indicating your plans to participate in the Workshop, Administrators' Forum and/or Observation Exchange.

C.A.S.E. - Beth Gurney
EdCo - Judith Medalia
North Shore - Lyn Fay
Shore - Carol Stern

Directions: 128 to Rt. 9 East, right on Parker Street, left at traffic light at Wheeler Road. Oak Hill School on left. Parking lot on right. Workshop in Music Room on second floor.

For further information, call Project CoNECT, 381-3355.

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

Donald Wertlieb, Ph.D.
May 12, 1982

Workshop

Families Under Stress: Coping with the Pressures on our Partnership with Parents

I. Typology of Stress

A. developmental, e.g. marriage, birth of a child, child goes off to school

B. stressful life events - "normative," e.g. move to new home, change of job, illness or death of family member

C. stressful life events - "non-normative," marital separation or divorce, bith of a disabled child

D. chronic, e.g. poverty, minority status, physical disability

E. "daily hassles," e.g. parking ticket, losing keys

F. "endemic," e.g. Reaganomics, Proposition 2½, scarcity

G. acute/crisis versus chronic/cumulative

H. nonevents, e.g. not receiving an expected raise

I. desirable or positive events, e.g. "uplifts" as stressors

J. change and readjustment

K. anticipated vs. unanticipated

II. Typology of Coping

A. individual and family mechanisms or processes

1. problem solving

2. palliative (emotion focused)

B. intervention

1. education

2. support

3. anticipatory guidance

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4. advocacy

III. Stress and Coping Processes

A. event perception and appraisal

B. risk factors, vulnerability

C. moderators, buffers

D. stimulus regulation and environmental control

E. adaptation as compromise

F. "maladaptive" coping

1. containing medical costs by decreasing preventive health care

2. alcohol or drugs to contain depression or anxiety

For discussion:

1. The family with a special needs child has usually undergone greater than the "normal" number of "stressful life events." To what extent does this place these families in better stead for dealing with currently increasing pressures versus placing them at higher risk for dysfunction or problems?

2. How do we, as helpers, professionals, paraprofessionals, service agencies, etc., mirror and/or respond to these same stresses we see impinging upon these families with special needs?

Appendix F
Newsletters

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

newsletter

Spring, 1982

MULTIDISCIPLINARY TRAINING FOR EDUCATORS OF YOUNG (3-7) SEVERELY HANDICAPPED CHILDREN

In response to Massachusetts and Federal personnel training needs, the Eliot-Pearson Department of Child Study at Tufts University has developed a project which provides preservice and inservice training to multidisciplinary personnel so that they can better serve young, severely handicapped children. The project, which is divided into three subcomponents, utilizes University-based training as well as field-based training in four Massachusetts educational collaboratives which are the most common providers of educational programs for young, low-incidence, handicapped children. Project CoNECT has been notified that federal funding will be provided for a second year, 1982-1983.

In Subcomponent I, personnel new to the field of education of young, handicapped children are enrolled in an eight-course sequence with a two-credit practicum for student teaching with preferential placement in the collaboratives. Successful completion of the program results in the Master of Education degree and the Massachusetts teaching certificate, "Teacher of Young (3-7 years) Children with Special Needs."

For Subcomponent II, consultants to four educational collaboratives will continue to address educational programming and professional development needs. Among training competencies addressed are: assessment and remediation in a developmental framework; curricular modifications for young, severely handicapped children; classroom and behavior management strategies; and consultation and communication skills for collegial and parent-staff teamwork. Subcomponent II also provides activities that foster communication among collaboratives with integrative staff development efforts.

In Subcomponent III, a summer institute, Medical and Rehabilitative Aspects of Childhood Disorders, will be held at the Tufts-New England Medical Center Hospital with speakers from that staff and use of the hospital and clinic facilities for observation. Serving to update the multidisciplinary professional and paraprofessional staff of the collaboratives in this project and the program's Master s degree candidates, the Institute addresses current efforts in the diagnosis, medical treatment, and rehabilitation techniques with severely and multiply handicapped children. Through discussion and role playing, Institute participants have the opportunity to interact with one another and to refine their skills in effective, multidisciplinary team communication and process.

An advisory committee, including community, collaborative, and parent members provides guidance at all stages of the project. A comprehensive plan for summative and formative program evaluation is integrated into the project.

Medford, Massachusetts 02155
617 628-5000

PROJECT CoNECT STAFF

Co-Directors: Penny Axelrod, Ed.D. and Donald Wertlieb, Ph.D.
Instructor and Supervisor of Student Teaching Placements: Ellen Horvitz, M.Ed.
Special Education Consultant: Kathleen Donnellan, M.A.
Administrative Assistant: Marjorie G. Manning, A.B.

PARTICIPATING COLLABORATIVES

C.A.S.E. (Concord Area Special Education Collaborative)

The school districts of Acton, Acton-Boxborough, Bedford, Bolton, Boxborough, Carlisle, Concord, Concord-Carlisle, Harvard, Lincoln, Littleton, Maynard, Nashoba, Stow, Sudbury, and Weston have voluntarily joined together to form this collaborative. C.A.S.E. serves the regional special education needs of its member school districts by allowing school districts to join together to plan, develop, and implement programs for special needs children. It affords school districts the opportunity to augment and supplement their special education programs through collaboration with other school districts. It provides a mechanism for people to share ideas and resources for the purposes of meeting a common need.

A major activity of the Collaborative is the administration and coordination of classes for low-incidence students. A population is considered low-incidence when a community, by itself, cannot provide a program for a variety of reasons such as insufficient numbers to form an adequate program, special needs requiring specific approaches, unavailability of appropriate public school or collaborative programs.

C.A.S.E. administers sixteen classes for 114 low-incidence students. The C.A.S.E. Preschool, the Elementary Class II, and the Developmental Class II all service the young special needs child.

The EdCo Brookline-Newton Preschool Program

This is a comprehensive program serving special needs children, ages three to six, in Brookline and Newton. The goal is to make it possible for each child to reach his developmental potential in all areas -- physical, intellectual and emotional.

Before assignment in the program, each child is evaluated. The findings of the evaluation are discussed with the parents, and an individualized educational plan is developed. On-going evaluations are made by teachers, and both formal and informal meetings are held, on a regular basis, with parents, who are also encouraged to visit the classroom. Teachers make visits to the children's homes throughout the year to help parents understand and carry through with the classroom program.

There are five morning classes: one at the Baker School in Brookline, two at the Oak Hill School in Newton, two at the Memorial-Spaulding School in Newton. There is one class for severely handicapped children, two classes of moderately handicapped children, and two kindergarten transition classes. There is also an afternoon speech and language program.

The staff consists of specialists in early childhood development, speech and language therapy, physical therapy, occupational therapy, a nurse, psychologists, and a coordinator. Medical evaluation is provided by the Brookline and Newton pediatricians. Members of the staff are available to private nursery schools to consult on specific problems.

The program occasionally makes use of private nursery schools and private schools for handicapped children for placement of children who are not appropriate for this program. There is close cooperation with several community facilities.

North Shore Special Education Consortium

This consortium serves the areas of Beverly, Danvers, Marblehead, Masconomet Regional, Peabody, Salem, Swampscott, Topsfield. Through its Preschool/Early Childhood programs, it works with a population of children who demonstrate a wide range of developmental disabilities from severe multiple handicap to moderate delay. Cognitive abilities range from initial sensori-motor stages of development through early preoperational stages.

The program endeavors to foster an awareness of self in relationship to environment by providing children with the basic skills (mobility, responsiveness to sensory stimulation, object manipulation) necessary to explore their environment. It encourages meaningful social interactions and communications systems and fosters independence in activities of daily living (i.e. toilet training, feeding, dressing, grooming). It stimulates cognitive development.

There are four preschool programs, all located in the West School, Peabody. There is one head teacher in each group and one or more paraprofessionals, depending upon size of enrollment. Physical and occupational therapists are also included in the staff. The maximum total enrollment is 28 children.

Shore Collaborative

This collaborative provides educational programs and services to a population with special needs, including the multihandicapped, moderately-severely retarded, visually impaired, auditorally impaired, behavior disordered, and learning disabled. Its member towns are Chelsea, Everett, Malden, Medford, Revere, Saugus, and Winthrop.

The programs operated by the Collaborative are located in a wide range of sites such as school district classrooms, D.M.H. facilities, State schools, and State hospitals. Shore receives funds from the State for contracts which the State has awarded to Shore. These contracts are for educational services to students in State schools. Various 89-313 and 94-142 grants are also assigned to Shore by member systems.

Approximately 425 special needs students, ranging in age from 3 to 22, are serviced by Shore programs. Personnel include program coordinators, special needs teachers, occupational and physical therapists, social workers, adaptive physical education teacher, social workers, psychologists, and teaching assistants.

RESOURCES

Many new curricular materials are becoming available for the severely and multiply-handicapped population. Some of the better or more unique of these are described below. Project CoNECT has purchased several of these materials, and they are available, for short-term loan, to programs participating in the Project. Project liaison members will be glad to provide more information.

Guide to Early Developmental Training, WABASH Center for the Mentally Retarded, Inc., $21.95. Order from: Allyn & Bacon, Inc., Longwood Division, Link Drive, Rockleigh, NJ 07647. Includes good developmental checklist for each skill area, including separate sections for sensory process training, with suggested teaching activities for each goal in checklist. Some suggestions are made for adapting teaching strategies to physically and sensorily handicapped children.

Programmed Environments Curriculum, James W. Tawney et al, $29.95. Order from: Charles E. Merrill Publishing Co., 1300 Alum Creek Drive, Box 508, Columbus, OH 43216. Skills for developmental levels 0-3 include assessment, teaching, and evaluation information for skills in language, cognitive, motor and self-help skills.

The Adaptive Behavior Curriculum: 3500 Prescriptive Behavior Analyses for Moderately, Severely, Profoundly Handicapped Students, Dorothy Popvich and Sandra L. Laham, $13.95. Order from: Paul H. Brookes, Publishers, P.O. Box 10624, Baltimore, Maryland 21204.

Helping the Mentally Retarded Acquire Play Skills: A Behavioral Approach, Paul Wehman, $12.50. Order from: Charles C. Thomas, Publisher, 301-327 East Lawrence Ave., Springfield, IL 62717. Paul Wehman is a specialist in education of the severely handicapped.

Teaching Eating and Toileting Skills to the Multihandicapped in the School Setting, Demos Gallender, $19.95. Order from: Charles C. Thomas, Publisher, 301-327 East Lawrence Ave., Springfield, IL 62717. Practical background information on physical handicaps and their effect on eating and toileting skills. Useful, clear remediation strategies for use in classroom settings.

A Sequential Curriculum for the Severely and Profoundly Mentally Retarded/Multi-Handicapped, Ellen M. Kissinger, $29.50. Order from: Charles C. Thomas, Publisher, 301-327 East Lawrence Ave., Springfield, IL 62717. Lists task analyzed objectives by skill areas. Facilitates IEP development and data collection.

HiCOMP Curriculum, HiCOMP Outreach Project, $14.00. Order from HiCOMP Outreach Project, Division of Special Education & Communication Disorders, 327 Cedar Building, The Pennsylvania State University, University Park, PA 16802. Includes a checklist of teaching objectives arranged in development sequence by subskill area. For each objective, precision teaching strategies and evaluation methods are suggested.

Portage Guide to Early Education, Bluma, Shearer, Frohman, and Hilliard, $46.00. Order from: Portage Project, CESA 12, Box 564, Portage, WI 53901. Developmental curriculum for ages 0-6 including teacher manual, individual student checklist, and index file of teaching suggestions. A special infant stimulation section is included with suggestions for development of the most basic skills.

Visual Symbol Communication Instruction: Part I: Receptive Instruction, Pamela S. Elder, $7.50. Order from Desoma Project, Center for Developmental and Learning Disorders, P.O. Box 313, University Station, Birmingham, AL 35294. Clear, structured guide to receptive introduction of a visual symbol system. It is designed for children with only "eye pointing" or gazing response but can be adapted for direct pointing. Some receptive understanding of language is presupposed.

Developmental Programming for Infants and Young Children, Vols. 1-3, D. Sue Schafer and Martha S. Moersch, Editors, 3 volume set, $14.50. Order from: University of Michigan Press, P.O. Box 1104, Ann Arbor, MI 48106. Includes a developmental assessment guide covering skills for 0-36 months in the areas of perceptual/fine motor, cognition, language, social/emotional, self-care, and gross motor. A separate manual, Vol. 3, suggests experiential stimulation activities for assessed skills. Suggestions are simply stated and use readily available materials, so the program may be used for parent-training as well. Adaptations for hearing impaired, motorically involved, and visually impaired children are given.

ADVISORY BOARD

The Project CoNECT Advisory Board provides a critically important forum for the exchange of ideas on the successful development and implementation of our plans for teacher preparation, consultation, and inservice training for educators of young, handicapped children. The Board consists of representatives from the training program, participating special education collaboratives, and community professionals with vested interests in high quality special education services. Though plans call for only two formal meetings per year, individual Board members are called upon to offer advice or assistance relevant to their particular expertise or interests.

The first meeting, held this past Fall, had an 87% attendance rate that was truly impressive and heartening. The meeting was especially productive in terms of initiating and renewing contacts among ourselves, articulating project plans, and identifying shared concerns. In particular, three ideas emerged as possible and appropriate elaborations of the Project.

One idea which generated some interest and enthusiasm was the publication of this newsletter to facilitate the networking objectives of the Project. The newsletter includes communications from each of the participating collaboratives as well as announcements of general interest. Distribution is within the Project community and the special education community.

Parent involvement was the focus of a second set of ideas. Each collaborative includes parents in its programming in particular ways. Might there be ways of joining forces to address some of these needs? Some people thought a talk or workshop(s) on topic(s) such as respite care, guardianship, or other legal advocacy issues would be especially relevant, timely, and well received. Elsewhere in this newsletter, you will see the announcement of our May 12 workshop, "Families Under Stress."

Liaison with early intervention programs was identified as another area meriting attention. Identification of mutual concerns and facilitation of cooperation were noted as needs. For some, the transition between early intervention and collaborative programming works well. For others, problems arise.

Members of the Advisory Board have volunteered to select the winning essays in the contest for two $195 scholarships to the Rehabilitation Design course described elsewhere in this newsletter.

A Spring meeting of the Advisory Board is planned for April 26 for continued consideration of these and other concerns and planning for continuation of Project CoNECT.

1981-1982
Advisory Board

Collaborative Representatives

CASE
- Ms. Judy Checkowski, Parent
- Ms. Ann Leiserson, Administrator
- Ms. Donna Marcotte, Teacher
- Dr. Gerald Mazor, Director

EdCo
- Ms. Judy Medalia, Director
- Ms. Jessica Weissman, Teacher
- Ms. Linda Zack, Parent

North Shore
- Mr. Tom Belski, Administrator
- Ms. Ann McCarthy, Teacher
- Ms. Eileen Mead, Teacher
- Mr. Kevin O'Grady, Director

Shore
- Ms. Susan Ferriter, Teacher
- Ms. Wilma Ringland, Parent
- Ms. Carol Stern, Administrator

Community Advisors

Mr. David Alexander
Eliot-Pearson Department
Tufts University

Dr. Patricia Boyle
Department of Psychiatry
Children's Hospital Medical Center

Ms. Sharon Bunn
Cambridge Somerville Mental Health and Mental Retardation Preschool Unit

Dr. William Costello
Department of Child Psychiatry
New England Medical Center

Dr. Sandra Miller-Jacobs
Department of Special Education
Fitchburg State College

Ms. Lee Phillips
Lesley College Graduate School
Division of Special Education

ANNOUNCEMENTS

◎ Applications are still being accepted to the Eliot-Pearson Department of Child Study Master of Education program leading to Massachusetts certification as Teacher of Young (3-7) Children with Special Needs. The program consists of a minimum of eight courses and a two course credit practicum.

Please write or call the Department to request a Graduate School catalog or obtain further information.

◎ A workshop entitled FAMILIES UNDER STRESS: Coping with the Pressures on our Partnership with Parents will be held at the Oak Hill School, 130 Wheeler Road, Newton, Mass. on Wednesday, May 12, 1982 from 1:00-3:00 p.m. The workshop is designed to explore how professionals in special education are coping with the ever increasing stress experienced by the families whose children we are committed to teaching. Unemployment, marital separation, social service cutbacks....few families are unaffected. Families with a special needs child may be even more vulnerable. How are we addressing these needs of our special families? All professional and paraprofessional staff members of C.A.S.E., EdCo, North Shore Consortium, and Shore are invited to attend.

Resource panelists are: Katherine Bove, R.N., Nurse Practitioner, Developmental Disabilities Clinic, Tufts-New England Medical Center, Kathleen Camara, Ph.D., Director, Children and Family Change Study, Tufts University, Donald Wertlieb, Ph.D., Co-Director, Project CoNECT.

Judith Medalia, Director of the EdCo Brookline-Newton Preschool Program invites program administrators to an informal discussion prior to the workshop, 12:00-1:00. Bring your lunch and meet your counterparts in other collaboratives.

Collaborative staffs may arrange to observe the EdCo Preschool Program in the morning prior to the workshop. If interested, please contact Kathleen Donnellan at Project CoNECT, 628-5000, Ext. 291.

R.S.V.P. to your Project CoNECT liaison indicating your plans to participate in the Workshop, Administrators/ Forum and/or Observation Exchange.

◎ Project CoNECT will help arrange an intersite visit for staff members in the participating collaboratives. If you would like to arrange a visit, please contact Kathleen Donnellan or Ellen Horvitz at Project CoNECT. EdCo invites visitors (by appointment) for the morning of May 12.

◎ The American Association on Mental Deficiency will hold its annual meeting from May 31 through June 4, 1982 at the Sheraton Boston Hotel. For further information, write to A.A.M.D., 5101 Wisconsin Ave., NW, Washington, DC 20016

☺ Win a Scholarship ☺

Project CoNECT, in cooperation with the Department of Rehabilitation Medicine, Tufts-New England Medical Center, announces a competition for two full scholarships ($195 each) to "A Short Course in Rehabilitation Design." The 40-hour course will be held August 9-13, 1982, on the Tufts campus in Medford. It is designed to help special educators and rehabilitation professionals to assess problem areas and approach technological problems of disabled individuals, to conceive creative solutions to unique consumer needs, to fabricate aides and devices. The program will include lecture and laboratory sessions.

Contestants must submit a 2-4 page written statement telling why they would like to

attend this workshop, how it would benefit the children or staff they work with, and how it would enhance their program offerings. Three of the Project's community advisors will judge the entries.

Anyone who is employed by a Project CoNECT affiliate (C.A.S.E. Collaborative, EdCo Preschool Program, North Shore Special Education Consortium, or Shore Collaborative) is eligible to enter. Entries must be postmarked by April 30, 1982 and mailed or delivered to Project CoNECT, Eliot-Pearson Department of Child Study, Tufts University, Medford, MA 02155. Please include your name, collaborative/consortium address, telephone number, and job title. The winner will be notified by telephone during the week of May 10.

MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

Through the Eliot-Pearson Department of Child Study and Project CoNECT, a summer institute will be held at the New England Medical Center Hospital and Tufts University Medical School, 171 Harrison Avenue, Boston, July 6-9 (Tuesday-Friday) and July 12-15 (Monday-Thursday) from 9 a.m. to 3:30 p.m. each day. The goal of the Institute is to provide updated information on current medical and rehabilitative treatment and management of the childhood disorders common among severely and multiply-handicapped young children.

The specific objectives of the Institute are as follows:

- to provide a review of the causes of handicapping conditions with information about antenatal diagnostic techniques and new diagnostic methods;
- to provide information on currently used techniques for the management, medical and rehabilitative treatment of severely and multiplyhandicapped young children;
- to inform professionals and paraprofessionals who work with young, handicapped children about theoretical foundations, evaluation procedures, and treatment techniques that form the bases of contributing disciplines;
- to provide opportunity for professionals from various disciplines to talk with one another in an atmosphere that will support exchange rather than isolation;
- to provide an opportunity for non-medical personnel to observe, first hand, the evaluation procedures, medical treatment, and physical examinations that take place in a pediatric hospital setting.

The Institute is open to staff members of the collaboratives participating in Project CoNECT. These staff members may attend free of charge and without credit.

Project CoNECT participants, and any other individuals, who wish to receive graduate credit must register, through the Tufts University Summer School, for Child Study 290, Deviations in Development and Learning, which is the course title for the Institute. Tuition is $350 plus a $30 registration fee. On successful completion of the requirements (readings and papers) participants will receive a grade for one Tufts course (4 credits). Those who plan to register through the Summer School should indicate that on the application form. A Summer School catalog will be mailed to those applicants.

Enrollment is limited, and places will be filled in order of receipt of the application form. Applications are due no later than April 30, 1982. On acceptance to the Institute, applicants will receive additional information, recommended readings, and course requirements.

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

newsletter

Spring, 1983

MULTIDISCIPLINARY TRAINING FOR EDUCATORS OF YOUNG (3-7) SEVERELY HANDICAPPED CHILDREN

Project CoNECT is now in its second year. Funded by the United States Department of Education, this project provides training at Tufts University and field experience in four Massachusetts collaboratives which provide educational programs for young, low-incidence, handicapped children. Students who successfully complete an eight-course sequence and a two-credit practicum receive the Master of Education degree and the Massachusetts teaching certificate, "Teacher of Young (3-7 years) Children with Special Needs."

Project consultants to the four collaboratives address educational programming and professional development needs such as curricular modifications, assessments and remediation strategies, and behavior management techniques. They also arrange activities which foster communication among collaboratives.

As part of Project CoNECT, a summer institute, Medical and Rehabilitative Aspects of Childhood Disorders, is held at the Tufts-New England Medical Center Hospital. Speakers from the hospital staff and observations in hospital facilities are utilized in the short, intensive institute, which is described elsewhere in this newsletter.

Project CoNECT STAFF

Director: Donald Wertlieb, Ph.D.
Instructor and Supervisor of Student Teaching Placement: Ellen Horvitz, M.Ed.
Special Education Consultant: Kathleen Donnellan, M.A.
Administrative Assistant: Marjorie G. Manning, A.B.

GOOD NEWS!

Word is in from Washington that our request for continuation funding has been approved, though at only the 1982 level. Details are being worked out aimed at sustaining the most valued and cost-effective components of Project CoNECT.

Medford, Massachusetts 02155
617 628-5000

UPDATE ON THE COLLABORATIVES

C.A.S.E./McCARTHY-TOWNE (Acton)

An exciting program is in full swing at the McCarthy-Towne School in Acton, which houses two C.A.S.E. classes. Project CoNECT, C.A.S.E. and McCarthy-Towne have joined forces to develop their own version of an "Understanding Handicaps" curriculum. Approximately 25 sixth grade students are volunteering in the C.A.S.E. classrooms, working with the special needs youngsters, usually on a one-to-one basis. The sixth graders each volunteer their energies 45 minutes per week for twelve weeks, at which time 25 new volunteers begin. From each group of 25, eight sixth graders have chosen to participate in weekly supervision sessions co-led by C.A.S.E. teacher, Donna Marcotte, and McCarthy-Towne teacher, Janet Nezda, with Project CoNECT'S Ellen Horvitz co-leading two sessions per month. These supervision sessions utilize a variety of teaching tools: the sixth graders are learning basic sign language, learning about the different handicapping conditions affecting the C.A.S.E. youngsters, discussing curriculum-tutoring ideas, behavioral issues and hearing guest lecturers, such as a speech/language therapist, discuss their roles.

In addition, a research project is underway. All 75 sixth graders were given a questionnaire regarding their attitudes and feelings about handicaps before any of them volunteered for tutoring. These same questionnaires will be distributed this month and in June to all sixth graders. By using "secret code numbers," we will be able to look at attitude changes in the three groups: 1) those who did not volunteer, 2) those who volunteered without supervision and 3) those who volunteered and participated in supervision sessions.

Finally, our sixth graders in the supervision groups have also volunteered to go to the kindergarten through fifth grades, accompanied by C.A.S.E. teacher, Debbie Goessling, to answer their peers' questions about special needs. McCarthy-Towne students and their principal, Parker Damon, are certainly doing their best to integrate their school fully by tackling the essence of integration -- attitudes. This program was written up in the Lowell Sun on Monday, February 17, 1983 in the hope that the community will see what the schools are trying to accomplish.

EdCo

In our second year of Project CoNECT, we have been able to focus our consultation efforts more clearly in the in-service level and expand teacher training efforts at the pre-service level.

Due to budgetary cuts, which resulted in decreased service time, we decided, at the beginning of the school year, to focus in-service consultation on one classroom at EdCo, the multiply-handicapped program, which Lisa Musante Bartmon teaches. Lisa had suggestions as to how the Project might provide input to her program this year. Specifically, during the first half of the year, the focus for consultation was on diagnostic-prescriptive observations of particular children. These observations culminated in a written report which synthesized information gained from the observations and suggested resources and classroom strategies that might be effective with a particular child. During this second half of the year, the focus of classroom consultation is on various teaching styles and techniques used within the classroom and the ways in which these strategies affect individual children. In addition to observation and follow-up reports, we plan to make a video tape of one morning's activities for staff viewing and analysis.

We were happy to be able to use two other EdCo classes as teacher-training sites this year. We placed one student in Mary Wiley's transition class in the Fall semester. In the Spring we again placed a student with Mary and another student in Nita D'Innecenzo's developmentally delayed classroom.

NORTH SHORE SPECIAL EDUCATION CONSORTIUM

This has been a year of changes in the Consortium. The Early Childhood and Preschool Classes have moved to the Hadley School in Swampscott with Eileen Mead Egan as teacher of the Preschool Class and Cathy Mason being hired this year to teach the Early Childhood Class. Tufts' Department of Child Study and Project CoNECT are pleased to have placed a student teacher in the Preschool Class each semester this year.

Project CoNECT's role has involved consultation in the Preschool Class this year, working primarily with issues concerning individual children in the program. We hope to continue developing appropriate and exciting curriculum to meet the needs of all of the children in this integrated program. There are seven "special needs" children and four "non-special needs" children in the classroom, with the latter attending three days per week.

SHORE COLLABORATIVE

The project CoNECT consultant with the Shore Collaborative this year has served as a facilitator and resource person in helping the multiply-handicapped program at Lindemann Center implement a new team-teaching approach.

In conjunction with Amy Bernstein, the program director, a series of workshops was developed and offered to staff on various aspects and models of team teaching, highlighting the changes in scheduling, instructional programming and staff attitudes that are necessary as teachers and therapists function as both service providers and consultants. Individual consultation is also being provided to classroom staff on the day-to-day implementation of the new model.

INTERSITE VISITS

We are happy to report that teachers from the Shore and EdCo programs have been exchanging visits. Lisa Musante Bartmon of EdCo attended a Basic Skills meeting given by Amy Bernstein at Shore on the Use of Active Stimulation Programs in the Classroom. Liz Henderson and Debbie Lambert of Shore are planning to visit Lisa's class at EdCo.

UPDATE: STUDENT TEACHING

During the 1982-83 year, the Department of Child Study and Project CoNECT have placed ten student teachers in classrooms to fulfill their practicum requirement toward certification as "Teacher of Young (3-7) Children with Special Needs." We are excited about each of these placements, and Project CoNECT is especially pleased that of these ten student teachers, six have been placed in Project CoNECT- affiliated preschool collaborative classrooms.: three at EdCo, two at North Shore Consortium, and one at the C.A.S.E. preschool class. We believe that our students are receiving excellent training and experience, and we are very appreciative of the time, energy and enthusiasm that the teaching staffs in each of these programs are giving to the student teachers.

RESOURCES

The following materials are available for loan to collaborative staff through Project CoNECT. Please contact your Project CoNECT liaison if you are interested in borrowing any of these materials.

Alder, J. O. and Magrab, P. R., COORDINATING SERVICE TO HANDICAPPED CHILDREN, Brookes, 1980

Anastasiow, N. J., et al, IDENTIFYING THE DEVELOPMENTALLY DELAYED CHILD, University Park Press, 1982

Anderson & Spain, THE CHILD WITH SPINA BIFIDA, Methuen & Co., Ltd., 1977

Batshaw & Perret, CHILDREN WITH HANDICAPS: A MEDICAL PRIMER, Paul Brookes, 1981

Berger, PARENTS AS PARTNERS IN EDUCATION, C. V. Mosby Co., 1981

Bigge, TEACHING INDIVIDUALS WITH PHYSICAL AND MULTIPLE DISABILITIES, 2nd ed., Charles E. Merrill, 1982

Bricker, Diane, ed., INTERVENTION WITH AT-RISK AND HANDICAPPED INFANTS, University Park Press, 1982

Campbell, MEASURING THE ABILITIES OF SEVERELY HANDICAPPED STUDENTS, Charles C. Thomas

Campbell & Baldwin, SEVERELY HANDICAPPED/HEARING IMPAIRED, Paul Brookes

Gabel, S. & Erickson, M. T., CHILD DEVELOPMENT AND DEVELOPMENTAL DISABILITIES, Little, Brown, 1980

Gallender, Demos, TEACHING EATING AND TOILETING SKILLS TO THE MULTIHANDICAPPED IN THE SCHOOL SETTING, Charles C. Thomas

Goldberg, SPECIAL TECHNOLOGY FOR SPECIAL CHILDREN, University Park Press, 1979

Greer, Anderson & Odle, STRATEGIES FOR HELPING SEVERELY AND MULTIPLY HANDICAPPED CITIZENS, University Park Press, 1982

Haring & Brown, ed., TEACHING THE SEVERELY HANDICAPPED, Vol 1 & 2, Grune & Stratton

Haring et al, UNIFORM PERFORMANCE ASSESSMENT SYSTEM, Charles C. Merrill, 1981

Healy & Stainback, THE SEVERELY MOTORICALLY IMPAIRED STUDENT

HICOMP Project, HICOMP CURRICULUM PACKAGE, Penn State University

Jansma, Paul, PSYCHOMOTOR DOMAIN AND THE SEVERELY HANDICAPPED

Kissinger, Ellen, A SEQUENTIAL CURRICULUM FOR THE SEVERELY AND PROFOUNDLY MENTALLY HANDICAPPED, Charles C. Thomas, 1981

Linder, T. W., EARLY CHILDHOOD SPECIAL EDUCATION PROGRAM DEVELOPMENT AND ADMINISTRATION

Lovass, THE ME BOOK, University Park Press, 1981

McCormack & Chamblars, TEACHING SEQUENCES: EARLY COGNITIVE TRAINING FOR THE SEVERELY AND MODERATELY HANDICAPPED, Research Press

Mullins, June, EDUCATION AND MANAGEMENT OF THE PHYSICALLY HANDICAPPED

Musselwhite & St. Louis, COMMUNICATION PROGRAMMING FOR THE SEVERELY HANDICAPPED, College Hill Press, 1982

PORTAGE GUIDE

Sailor, W. & Guess, D., SEVERELY HANDICAPPED STUDENTS: AN INSTRUCTIONAL DESIGN, Houghton Mifflin, 1983

Sailor, Wilcox, Brown, METHODS OF INSTRUCTION FOR SEVERELY HANDICAPPED CHILDREN, Paul H. Brookes, 1980

Sapir, S. G. & Cort, R. H., CHILDREN WITH SPECIAL NEEDS: CASE STUDIES IN THE CLINICAL TEACHING PROCESS, Brunner/Mazel, 1982

Sasserath, V. J., ed., MINIMIZING HIGH RISK PARENTING, Johnson & Johnson Baby Products Co., 1983

Schofer & Moersch, ed., DEVELOPMENTAL PROGRAMMING FOR INFANTS AND YOUNG CHILDREN

Simpson, R. L., CONFERENCING PARENTS OF EXCEPTIONAL CHILDREN, Aspen Systems Corp., 1982

Sterenberg & Adams, EDUCATING SEVERELY AND PROFOUNDLY HANDICAPPED STUDENTS, Aspen Systems Corp., 1982

Tawney et al, PROGRAMMED ENVIRONMENTAL CURRICULUM, Charles E. Merrill

Thomas, M. Angele, DEVELOPING SKILLS IN THE SEVERELY AND PROFOUNDLY HANDICAPPED

Thomas, M. Angele, HEY, DON'T FORGET ABOUT ME, CEC, 1976

Zigler, E. & Balla, D., MENTAL RETARDATION: THE DEVELOPMENTAL DIFFERENCE CONTROVERSY, Lawrence Earlbaum Associates, 1982

Testing Materials

Brigance K & 1 Screen (for kindergarten & first grade) Albert Brigance, Curriculum Associates, 1982

K-ABC Kaufman Assessment Battery for Children, Alan S. & Nadeen L. Kaufman, American Guidance Service, Circle Pines, MN, 1983

The Psychoeducational Assessment of Preschool Children, Kathleen D. Paget & Bruce A. Braken, Grune & Stratton, 1983

ANOTHER RESOURCE

Able Child is a toy store in New York with toys geared specifically toward children with disabilities. Designed for parents and children rather than for professionals, the store is run by occupational therapists who adapt commercially available items to particular children and handicapping conditions. Items are designed to look as much like nonadapted toys as possible. Able Child also carries practical items, and they accept mail orders. For more information contact: Able Child, 154 Chambers Street, New York, NY 10007 (212) 406-2814.

MICROCOMPUTERS IN SPECIAL EDUCATION

CEC held a national workshop on "Microcomputers in Special Education" in Hartford, Connecticut, from March 10-12. I attended and can definitely report that the age of computers has come to special education. All sessions were overfilled, with participants from all across the country.

Presentations demonstrated research, hardware (machines), and software (programs) applicable to all types and degrees of disabilities. I concentrated on those presentations addressing the uses of the computer with the severely and multiply handicapped. After seeing several impressive demonstrations in this area, I came back convinced of three things: First, that in the not too distant future, computers will significantly alter and improve the quality of life for people with severe and multiple disabilities; second, that learning to operate a switch should be a priority goal for all severely handicapped children; and third, that sufficient technology and prototypes exist now to make use of a microcomputer in special education programs, particularly those serving children with severe handicaps. I would be happy to provide more specific information to anyone who is interested.

Kathleen Donnellan

WORKSHOP: FOCUS ON SPECIAL SIBLINGS

Most of us focus our energies on individual special needs children within our classrooms, but we keep in mind the family from which the child comes and to which he or she returns each day. Most often, "family" means "parents," or even just "mother," in our thinking and practice. Often there are other family members -- brothers and sisters of the child in our programs -- whose needs and contributions must be considered if we are to be truly comprehensive in our programming and planning.

On February 2, 1983, the McCarthy-Towne School in Acton, a C.A.S.E. Collaborative program site, hosted a Project CoNECT Intercollaborative Workshop on "Siblings of the Developmentally Disabled." Twenty-eight professionals and paraprofessionals, representing each of the four Project CoNECT collaboratives -- C.A.S.E., EdCo, Shore and North Shore Special Education Consortium -- participated. Karen Cahill and Kristine Opalka, nurses from the Eunice K. Shriver Center in Waltham, presented an overview of the literature on siblings of the disabled and summarized the very exciting work their center has been doing over the past seven years with short-term groups for siblings of DD children. The various issues and needs of children at different developmental levels were presented, along with examples of activities and procedures useful for groups of preschoolers, school-aged children and adolescents. Among the activities were exercises aimed at concretizing the experiences and perspectives of the disabled child, role playing to explore common family situations, and board games adapted to engage the children in problem solving.

Participants enjoyed hearing about the groups and seeing the slide presentation on one preschool group. Some discussion focused on how to provide such needed services to families -- either through referral to the Shriver Center or through program development in the collaboratives or local communities. Other discussion focused on the implications of how Cahill's and Apalka's work could be utilized for home visiting and family work in many settings.

Among the other resources mentioned by Cahill and Opalka were the resource library at Shriver Center, where literature, program materials and games can be borrowed, and the National Sibling Network, which regularly updates information on services to special needs families. In the words of more than one participant, the workshop was "excellent!"

ANNOUNCEMENTS

THIRD ANNUAL COURSE ON PEDIATRIC REHABILITATION

The Department of Rehabilitation Medicine of Tufts University School of Medicine and New England Medical Center will sponsor the Third Annual Course on Pediatric Rehabilitation, June 20-24, 1983 at the Boston Park Plaza Hotel. The course is designed to provide participants with a comprehensive overview of the fundamental principles of rehabilitation of the physically disabled child. Course content includes information pertaining to specific disease states; techniques of functional assessment; technological advances in equipment and devices; educational and psycho-social issues; recreation for the disabled child; and legal concerns. The format of the course will include formal didactic sessions, intensive workshops, a family panel and media presentations.

Tuition for the course is $275. For more information, please contact Kathy Rowe at 956-5032.

ORTHO WORKSHOPS, APRIL 4-8, 1983
BOSTON PARK PLAZA

Project CoNECT Director, Donald Wertlieb, will join representatives from the Connecticut Health/Education Collaborative Project to provide a workshop on "Practical Collaboration Strategies for Serving Young Handicapped Children" at the 60th Annual Meeting of the American Orthopsychiatric Association. The workshop is scheduled for Wednesday, April 6, 9 a.m. to 12 noon.

The development and statewide implementation of a system for coordinating services to handicapped children through service and interdisciplinary curriculum, including media components, will be described. A variety of adaptive capacities and organizational responses using different service delivery approaches to cope with budget cutbacks in early childhood special education programs is included.

Resource persons at the workshop include Sara Palmeri, M.D., MPH, child development specialist; Joanna Erikson, MPH, curriculum consultant; Lois Davis, M.A., psycho-educational specialist; Robert Abramowitz, M.D., child psychiatrist and media consultant; as well as Donald Wertlieb. Maureen Slonim, R.N., M.S., will moderate the workshop.

The American Orthopsychiatric Association brings together psychiatrists, psychologists, social workers, educators, nurses, lawyers, pediatricians, sociologists and other professionals committed to interdisciplinary promotion of mental health and study of human development. Founded in 1924, "Ortho" has provided important leadership in the fields of mental health, special education and child development. The 60th Annual Meeting, to be held April 4-8, 1983 at the Boston Park Plaza, includes a wide array of workshops, symposia, panels and institutes of interest to the Project CoNECT community. Write Ortho at 1775 Broadway, New York, New York 10019 for program and registration materials.

Save the Date

APRIL 27, 1983

1:30-3:30 p.m.

another intercollaborative workshop

MEETING THE CLASSROOM AND PROGRAM NEEDS OF THE POST-TRAUMA CHILD

Discussion of the considerations involved in programming for children with "acquired" special needs. After a period of normal development and education, accidents, surgery or disease may create handicaps and disabilities which pose particular challenges for educators and therapists. What are these "special" special needs, and how do we address them?

Workshop Leaders

DOROTHY CASOLARO, M. Ed.
Inpatient 766 Coordinator
Kennedy Memorial Hospital for Children

and

MARGARET COYNE, M. Ed.
Classroom Teacher
Head Trauma Unit
Kennedy Memorial Hospital for Children

- Hosted by Shore Collaborative at a Winthrop location to be announced

Sponsored by Project CoNECT

ADVISORY BOARD NOTES

Progress in our preservice and inservice training efforts has been sustained despite funding cutbacks affecting Project CoNECT and some of the participating collaboratives. This optimistic report opened the December 6, 1982 meeting of the Project CoNECT Advisory Board. Though there has been a decrease in consultation time available from Project staff to some classrooms, this year's "connections" appear to be working well for those participating. Another good sign is the involvement of nine student teachers in Project CoNECT this semester.

Continued interest in cross-visiting was apparent, and Advisory Board members plan to get more involved in structuring opportunities for staff to visit programs in other collaboratives. The Curriculum Laboratory at Eliot-Pearson appears to be another good arena for exchange of ideas and support among people from the various collaboratives.

Plans for the Summer Institute, Medical and Rehabilitative Aspects of Childhood Disorders, are well under way, with Sandy Baer serving as coordinator. The program is described in detail elsewhere in this newsletter.

Some time was devoted to exchange of ideas about how particular programs are coping with tightening budgets. There continues to be an interest and need for such exchange of administrative know-how. Collection of accessible data will be carried out over the next several months.

MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

Through the Eliot-Pearson Department of Child Study and Project CoNECT, a summer institute will be held during the summer of 1983 at the New England Medical Center Hospital and Tufts University Medical School, 136 Harrison Avenue, Boston. Dates of the Summer Institute are June 27-30 (Monday-Thursday) and July 5-8 (Tuesday-Friday) from 9:30 a.m. to 3:30 p.m. each day. The goal of the Institute is to provide updated information on current medical and rehabilitative treatment and management of the childhood disorders common among severely and multiply-handicapped young children.

The specific objectives of the Institute are as follows:

- to provide a review of the causes of handicapping conditions with information about antenatal diagnostic techniques and new diagnostic methods;
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The Institute is open to staff members of the collaboratives participating in Project CoNECT. These staff members may attend free of charge and without credit.

Project CoNECT participants, and any other individuals, who wish to receive graduate credit must register, through the Tufts University Summer School, for Child Study 290, Deviations in Development and Learning, which is the course title for the Institute. Tuition is $370 plus a $32 registration fee.

On successful completion of the requirements (readings and papers) participants will receive a grade for one Tufts course (4 credits). Those who plan to register through the Summer School should indicate that on the application which is attached. A Summer School catalog will be mailed to those applicants.

A limited amount of financial aid is available for this course. Students in need of financial aid should submit an explanatory statement (no longer than one page) along with the application form, indicating their need.

Enrollment is limited, and places will be filled in order of receipt of the application form. Applications are due no later than April 22, 1983. On acceptance to the Institute, applicants will receive additional information, recommended readings and course requirements.

PROJECT CoNECT SUMMER INSTITUTE
Application Form

To: Project CoNECT
Eliot-Pearson Department of Child Study
Tufts University
Medford, MA 02155

From:

Name: _____

Position: _____

Home Address: _____

_____

Telephone: _____

Work Address: _____

_____

Telephone: _____

___ I intend to take this institute for credit ($370 plus $32 registration) so please send Tufts Summer School registration information.

___ I am in need of financial aid and have attached an explanatory statement.

___ I work in a Project CoNECT affiliated collaborative and would like to register for the Institute without charge and without credit.

SEND APPLICATION TO PROJECT CoNECT, ELIOT-PEARSON DEPARTMENT OF CHILD STUDY, TUFTS UNIVERSITY, MEDFORD, MA 02155. APPLICATION DEADLINE, APRIL 22, 1983.
For further information, please contact Mrs. Marjorie G. Manning at 381-3355.

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative **N**etwork for **E**arly **C**hildhood **T**raining

newsletter

Fall, 1983

MULTIDISCIPLINARY TRAINING FOR EDUCATORS OF YOUNG (3-7) SEVERELY HANDICAPPED CHILDREN

Project CoNECT is now in its third year. Funded by the United States Department of Education, this project provides training at Tufts University and field experience in four Massachusetts collaboratives which provide educational programs for young, low-incidence, handicapped children. Students who successfully complete an eight-course sequence and a two-credit practicum receive the Master of Education degree and the Massachusetts teaching certificate, "Teacher of Young (3-7 years) Children with Special Needs."

Project consultants to the four collaboratives address educational programming and professional development needs such as curricular modifications, assessments and remediation strategies, and behavior management techniques. They also arrange activities which foster communication among collaboratives.

As part of Project CoNECT, a summer institute, Medical and Rehabilitative Aspects of Childhood Disorders, is held at the Tufts-New England Medical Center Hospital. Speakers from the hospital staff and observations in hospital facilities are utilized in the short, intensive institute, which is described elsewhere in this newsletter.

WELCOME

Please join us in welcoming Patricia Place onto the staff of Project CoNECT. Patti is a new Ph.D. candidate in the Eliot-Pearson Department of Child Study. Part of her program includes a fellowship on Project CoNECT, where she will serve as a consultant to Project collaboratives, coordinate some inservice training and assist with program evaluation.

Patti hails from the University of North Carolina and the Frank Porter Graham Child Development Institute, where she completed her early childhood special education M.Ed. Since then she has developed and implemented a wide range of programming for young, special needs children in North Carolina, Virginia and Massachusetts. Just published is her book, with David Lillie, Partners: A Guide to Working with Schools for Parents with Special Instructional Needs (Scott, Foresman and Company).

Medford, Massachusetts 02155
617 628-5000

UPDATE ON THE COLLABORATIVES

C.A.S.E. (McCarthy-Towne)

The sixth grade "understanding handicaps" program is under way with great enthusiasm this year. After a slide tape presentation by C.A.S.E. teacher, Donna Marcotte, approximately 32 sixth graders signed up to volunteer -- sixteen for the first half of the year and sixteen for the second half. All volunteers will work in one of the classrooms (or both if they wish) a total of 45 minutes per week, and all receive 45 minutes of weekly supervision facilitated by Donna, McCarthy-Towne counselor, Nancy Kolb, and Project CoNECT's Ellen Horvitz. What an exciting group this year! They ask numerous questions, have considerable insight and much enthusiasm! After each volunteer session in the classroom, the students make brief comments in their "journals," describing what has occurred that day and making note of questions or concerns they have. Donna and Nancy review each journal prior to supervision and encourage the sixth graders to verbalize their questions to the group. The students are planning to create a workbook at the end of the year based upon their journal entries (and photographs) to help other McCarthy-Towne students to understand this special program. A video-taping of a supervision session is under way for the middle of November. Thanks again to Parker Damon and to the sixth grade teachers for their support.

P.S. Some individual consultation is under way between the teachers and Project CoNECT. One of the children in Debbie's class is ready to move up to Donna's class, but considerable preparation is needed for this "graduation."

EdCo

Project CoNECT is continuing to work with the EdCo preschool program in a variety of ways. Consultation services, including diagnostic-perscriptive observations and resource-sharing are being provided to Jessica's and Lisa's classes, which serve children with severe to moderate handicaps.

Mary Wiley's transition class continues to be a practicum site for two students this semester. When our number of student teachers increases, in the spring, other EdCo classes may again become practicum sites, continuing what has been a fruitful relationship for all.

North Shore Special Education Consortium

The integrated preschool program has expanded this year and now includes eleven "special needs" and eight "neighborhood" children, many of whom are "returnees." In addition to having more children enrolled and an enlarged, exciting classroom space, the Consortium has also hired two Tufts Child Study people. Beth Viehmann (M.Ed., December, 1982) is the new head teacher in the program, joining Eileen Mead Eagan, and Debbie Schreiber Convicer (combined B.A., M.Ed., June, 1984) has been hired as a classroom assistant. Laurie Schoeffler, a Tufts Child Study undergraduate student, is currently enjoying doing a field placement in the preschool as well.

The focus of Project CoNECT's work with the Consortium class this year is primarily curriculum development, to best meet the diverse needs of 3, 4 and 5 year old children who are at quite different developmental stages. This has involved changes in group times, snack, toileting and lunch coordination as well as the

purchase or creation of new materials, some of which have the enhancement of academic readiness skills as their base.

A series of parent workshops has also begun at the Consortium, with Project CoNECT consultants, Kathleen Donnellan and Sandy Baer (both special educators and parents of 3 year olds) along with Dena Cherenson (Eliot-Pearson Children's School teacher) co-leading a session on "Separation Issues Affecting Preschoolers and Their Parents."

IMPORTANT NOTICE

What?

Fall Intercollaborative Workshop

"UNIQUE AND INNOVATIVE ASPECTS OF COLLABORATIVES' PROGRAMS"

When?

Wednesday, November 30, 1983
2-4 P.M.

Where?

Eliot-Pearson Children's School
105 College Avenue
Tufts University
Medford, Mass.

Presentations by each of the collaboratives on aspects of their programs considered exceptionally effective and unique. An opportunity to learn from each other's experiences to the benefit of all. Some topics that may be presented include: Shore's procedures of active stimulation, EdCo's alternative communication techniques, CASE's mainstreaming approach, and North Shore's integrative preschool program.

Sponsored by Project CoNECT

REPORT ON COMPUTERS IN SPECIAL EDUCATION CONFERENCE

On September 19th and 20th, the Massachusetts Department of Education, Division of Special Education, and the Northeast Regional Resource Center held a State-wide conference on Microcomputers for Special Education. The large number of participants, including several staff members from Project CoNECT collaboratives, attested to the importance of this topic. If there was one central theme for the conference, it was that microcomputers are affecting the lives of all of us, and their impact is increasing daily. As special educators, we have a particular responsibility to prepare our students for a world in which computers will be commonplace, both in the home and in the work place, and to direct the use to which they will be put in education.

The potential this new technology offers to individuals with handicaps is essentially untapped. Projects presented at this conference included the use of microcomputers as communication aids and personal assistance devices; the use of computer-aided instruction which provides self-paced, interactive learning in a variety of special needs situations and which frees the teacher from many repetitive drill and practice activities; and the use of Logo (a computer language developed at MIT) particularly in teaching children with serious motor and perceptual impairments. Presentations ranged from those serving preschool children to vocational training to in-service training; from self-contained classrooms to resource rooms and mainstreamed environments. The use of computers for data management at both the administrative and the instructional level was demonstrated.

But the conference also underscored the fact that computer technology has come rapidly — to an essentially unprepared generation of educators. While teachers do not necessarily need to be able to program computers, they must understand how to use them. An awareness of the need educators have for help in learning about this new technology has led to the development of a number of resources. One of the most important contributions this conference made was to highlight some of those resources which might be helpful to special educators. A list of these follows, as does a selected bibliography.

RESOURCES

Apple Computer Clearinghouse for the Handicapped, a project of the Prentke Romich Company, develops custom hardware and software and provides a catalog summarizing programs developed for the handicapped. For information write to: Prentke Romich Company, RD 2, Box 191, Shreve, Ohio 44676.

The Bureau of Educational Resources/Television (BER) provides a variety of resources and services through the regional educational centers. Of particular interest is an Instructional Technology Resource Book, which provides information on programs and practices, materials, consultants, and organizations and resource centers related to technology in education. Contact your local regional center for more information.

Massachusetts Educational Television (MET) will be broadcasting several series aimed at educating the public in the new technologies. Many of these programs are also available through MET on video tapes for in-service training. Write MET, 27 Cedar Street, Wellesley, MA 02181 for more information and a program guide.

Project EduTech is a federally funded project which collects and disseminates information in a number of technology areas. For information and their product list, write Project EduTech, JWK International, 7617 Little River Turnpike, Annandale, VA 22003.

Trace Research and Development Center, University of Wisconsin, 314 Warsman Center, Madison, Wisconsin 53706, is a nationwide clearinghouse and registry for information on hardware and software used by individuals with physical handicaps.

Grant money is available through the Massachusetts Department of Education under the Commonwealth In-Service Institute and Technical Assistance grant programs for in-service training and program development. Specifications for these two grant programs differ. Contact your local regional center for complete information.

SELECTED BIBLIOGRAPHY ON MICROCOMPUTERS IN SPECIAL EDUCATION

Closing the Gap, a newsletter about computers for individuals with handicaps, P.O. Box 68, Henderson, Minnesota 56044.

Exceptional Children, October, 1982 issue, was devoted to microcomputers' place in special education.

Goldenberg et al, Computers, Educators and Special Needs, Addison-Wesley, 1983 ($13.95).

Goldenberg, Paul E., Special Technology for Special Children, University Park Press, 233 E. Redwood Street, Baltimore, MD 21202.

Hagen, Dolores, How to Use Microcomputers with the Handicapped Child, Reston Publishing Company, 11480 Sunset Hills Road, Reston, VA 22090.

Nane et al, Computer Technology for the Handicapped in Special Education: A Resource Guide, International Council for Computers in Education, 135 Education, University of Oregon, Eugene, Oregon 97403 ($8.50).

Personal Computers for the Physically Disabled: A Resource Guide, pamphlet prepared by Apple Computer, Inc., 10260 Bandley Drive, Cupertino, CA 95014, briefly describes selected projects and case studies, lists addresses for further information.

Taber, Florence M., Microcomputers in Special Education -- Selection and Decision Making Process, CEC, 1920 Association Drive, Reston, VA 22091-1589, 1983.

The Computing Teacher, February, 1983 issue, was devoted to special education.

Training Times, a publication of the Massachusetts Department of Education, Division of Special Education, Quincy Center Plaza, 1385 Hancock Street, Quincy, MA 02169, April, 1983 issue, was devoted to computers in special education.

CEC WORKSHOP TO HIGHLIGHT COLLABORATIVE WORK

On April 26, 1984, Project CoNECT staff, Donald Wertlieb, Ellen Horvitz and Kathleen Donnellan, will serve as faculty for a workshop entitled Service for Young Handicapped Children: Interagency Collaboration in an Era of Retrenchment to be presented as part of the Annual Convention of the Council for Exceptional Children. They join colleagues associated with the Connecticut Collaborative Project — Maureen Slonim, Lois Davis and Holden Waterman — to discuss issues of central concern to the Project CoNECT community.

Special education for young, handicapped children has, until recently, been a high priority, "most-in-need" domain of public policy at the State and Federal levels. With the impact of budget cuts and withdrawal of commitment to these public priorities, these services for these populations have been especially vulnerable and compromised. This workshop or panel will consider a range of service delivery and program development issues, with an emphasis upon interagency collaboration and adaptation to the current economic entrenchment.

The Connecticut Collaborative Project was developed under a BCHS Grant to the Connecticut Department of Health Services in cooperation with the Department of Education. The demonstration model developed in Connecticut is a coordinated system with priority on early identification and linkage to existing community intervention resources. The referral instrument, a checklist of medical conditions and developmental concerns, initiates a referral process providing a single entry into health, education and community services. The Community Resource Team consists of representatives from public and private intervention resources. This team offers assistance in planning by clarifying diagnostic issues, service needs and interagency responsibility. The Team's clearing house function provides a coordinated service approach to the child and family.

Experiences of this collaborative approach indicated that interdisciplinary training must precede interdisciplinary services. Curriculum materials developed to promote interagency/interdisciplinary cooperation are:

Precinct 94-142, a 22-minute satire on the communication difficulties surrounding early identification.

Within Normal Limits, a 23-minute semidocumentary on medical and other special evaluations.

A Guide to Resources: A Handbook for Interdisciplinary Staff Development. Annotated compilation of appropriate audio-visual resources; curriculum and training resources; State and Federal Agency Resources and a selected bibliography.

Issues in Collaboration, a companion document to provide a framework and guide to professional and interdisciplinary collaboration.

Drawing upon the resources and experiences of Project CoNECT and the Connecticut Collaborative Project, this workshop will provide for exchange of information among professionals in special education and mental health with interests in direct clinical services as well as program design and evaluation. Case examples and analyses and curriculum materials will be used to generate discussion of educational, clinical and organizational implications. Strategies for optimizing interagency and interdisciplinary collaboration will be emphasized.

The 62nd Annual Convention of the Council for Exceptional Children will meet in Washington, DC, April 23-27, 1984. Write CEC, 1920 Association Drive, Reston, VA for details on the program and registration.

WORKSHOP ON THE KAUFMAN ASSESSMENT BATTERY

Project CoNECT staffperson, Ellen Horvitz, who is Director of Special Needs in the Child Study Department and who also maintains a private practice doing developmental and psychoeducational testing of young (2-7) children, attended an intensive, three-day workshop, this past summer, on the philosophy, design and use of a new test, the K.A.B.C. The Kaufman Assessment Battery for Children (published by American Guidance) evaluates children from ages 2½ to 12½, yielding I.Q. and achievement scores based on the premise that children should be evaluated by the way in which they process information, i.e. sequentially (arranging stimuli in serial order) or simultaneously (synthesizing information, mostly spatial or analogic in nature. The achievement section measures acquired knowledge and academic skills.

Sections of the test are quite innovative and well designed. It is as yet too early to ascertain the instrument's impact on the assessment field. Due to the importance most clinicians attribute to language areas, it is doubtful that this test will replace the Wechsler or McCarthy Scales, although it may well provide useful supplementary information, particularly with nonverbal and hearing-impaired populations.

FOURTH ANNUAL COURSE ON PEDIATRIC REHABILITATION

The Department of Rehabilitation Medicine of Tufts University School of Medicine and New England Medical Center will sponsor the Fourth Annual Course on Pediatric Rehabilitation, June 25-29, 1984 in Boston.

The course is designed to provide participants with a comprehensive overview of the fundamental principles of rehabilitation of the physically disabled child. Course content includes information pertaining to specific disease states; techniques of functional assessment; technological advances in equipment and devices; educational and psycho-social issues; recreation for the disabled child; and legal concerns. The format of the course will include formal didactic sessions, intensive workshops, a family panel, and media presentations.

For more information, please contact Kathy Rowe at 956-5032.

Project CoNECT STAFF

Director: Donald Hertlieb, Ph.D.
Instructor and Supervisor of Student Teaching Placement: Ellen Horvitz, M.Ed.
Special Education Consultant: Kathleen Donnellan, M.A.
Graduate Fellow: Patricia A. Place, M.Ed.
Administrative Assistant: Marjorie G. Manning, A.B.

1983 SUMMER INSTITUTE
MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

Through the Eliot-Pearson Department of Child Study and Project CoNECT, the Summer Institute, Medical and Rehabilitative Aspects of Childhood Disorders, was held June 27-30 and July 5-8, 1983 at Tufts New England Medical Center. Sandra Baer, M.Ed., served as the Institute coordinator, and William Singer, M.D., pediatric neurologist at New England Medical Center and Associate Professor of Medicine at Tufts University School of Medicine, served as the medical consultant. The goal of the Institute was to provide updated information on current medical and rehabilitative treatment and management of the childhood disorders common among severely and multihandicapped young children.

Eight staff members from Project CoNECT collaborative programs attended the forty hours of instruction. One of these participants from the collaboratives elected to take the Institute for graduate credit. The lectures and associated activities were free to the participants taking it without credit. In addition to the Project CoNECT participants, nine other individuals attended the Institute for graduate credit.

The Institute was rated as highly successful by participants, some of whom reported that the length of time for the amount of material was too brief. The level of instruction was judged to be very good overall. Participants were particularly appreciative of the exposure to a wide range of specialists and physicians, many of whom generally have very limited time and opportunity to meet with teachers and other service providers in this fashion. The positive response by participants was most encouraging.

There will be another Institute in the summer of 1984. Sandra Baer will again coordinate the program, and although the actual dates have not yet been established, it is expected that the Institute will be held during the last week of June and the first week of July, 1984.

Appendix G
Summer Institute Syllabi

TUFTS UNIVERSITY
ELIOT-PEARSON DEPARTMENT OF CHILD STUDY

CS 290
Deviations in Development and Learning

Dr. Penny Axelrod
Summer, 1982

Meeting Place: Patten A
Tufts University School of Medicine
136 Harrison Ave.

Texts: (R) Mullins, J. A Teacher's Guide to the Management of Physically Handicapped Students, Charles C. Thomas, 1980.

(R) Turnbull, A.P. & Turnbull, H.R. Parents Speak Out, Charles Merrill, 1978. A very powerful book which has greater impact than brevity would suggest.

Also suggested: Featherstone, H. A Difference in the Family, Penguin Paperbacks, 1980.

The following four books should be used as references for further reading to supplement the texts:

On order in Bookstore: Batshaw, M.L. & Perret, Y.M. Children with Handicaps: A Medical Primer, Paul H. Brookes, 1981.

(R) (TUSM) Downey, J.A. & Low, N.L. The Child with Disabling Illness, W. B. Saunders, 1974.

(R) Kolb, B. & Whishaw, I.Q. Fundamentals of Human Neuropsychology, W. H. Freeman, 1980. It is a well-written, thorough reference book in the areas of neurology and psychology.

(R) (TUSM) Travis, G. Chronic Illness in Children, Stanford University Press, 1976.

(R) = on reserve at Wessell
(TUSM) = on reserve or a periodical at Tufts University Medical School Library
* Photocopy

JULY 6
Tuesday

9:30-10:45 Thinking about the Brain: A Review for Educators of the Central Nervous System and Neuropsychology.
Batshaw & Perret, Ch. 12
(R) Kolb & Whishaw, Chapters 1-9.
(R) Teylor, T.J. The Brain Sciences: An Introduction in Education and the Brain, 77th Yearbook of the National Society for the Study of Education, Pt. II, edited by Chall & Mirsky, 1978. Very readable.
(R) (TUSM) For a readable discussion of several aspects of the brain, see the following articles in Scientific American, 1979, 241 (September):
Geshchwind, N. Specializations of the human brain, pp. 180-199.
Hubel, D.H. The brain, pp. 44-53.
Kety, S.S. Disorders of the human brain, pp. 202-214.

11-12:30 Overview of Causes of Mental Retardation, Patterns of Inheritance, Chromosomal Defects, Metabolic Disorders.
Speaker: Mary Ampola, M.D., Pediatrician, NEMH
Readings:
Mullins, Ch. 4.
Batshaw & Perret, Ch. 1-8.

1:30-3:30 The Developmental and Neurological Examination
Speaker: Jerome S. Haller, M.D., Pediatric Neurologist, NEMCH
Class will meet in the Tufts Medical School Library (2nd floor) to view videotapes.
For details of the neurological examination, please see:
(TUSM) Illingworth, R.S. The Development of the Infant and Young Child: Normal and Abnormal, Williams & Wilkins, 7th edition, 1980.
(TUSM) Touwen, B.C.L. & Prechtl, H.R.R. The Neurological Examination of the Child with Minor Nervous Dysfunction. J. B. Lippincott, 1970.

JULY 7
Wednesday

9:30-10:45 Spina Bifida - Incidence, Etiology, Treatment and Management
Speaker: Louis Bartashesky, M.D.
Readings:
Mullins, Ch. 11
(TUSM)* Bull, M.J. et al, Myelodysplasia, Orthopedic Clinics of North America, April, 1976, pp. 475-499.
Downey & Low, Ch. 7, Spina Bifida
Travis, Ch. 17, Spina Bifida: Myelomeningocele Form

	11-12:30	Diagnostic Techniques, CT scan, EEG, PET, BEAM, Evoked Potentials Speaker: Penny Axelrod, Ed.D. Reading: *Duffy, F.H., Denckla, M.B., Bartels, P.H. & Sandim, G. Dyslexia: Regional differences in brain electrical activity by topographic mapping, Annals of Neurology, 7, 1980, pp. 412-420.
	1:30-2:45	Mental Retardation: A developmental perspective Speaker: Penny Axelrod, Ed.D.
	2:50-3:30	Film and discussion: A Dream Come True, a film of residential community (New England villages) for mentally retarded adults. Reading: Batshaw & Perret, Ch. 11
JULY 8 Thursday	9:30-10:45	Neurological Aspects of Cerebral Palsy Speaker: Jerome S. Haller, M.D.
	11-12:30	Rehabilitation and Management of Children with Cerebral Palsy Speaker: Bruce Gans, M.D. Readings: Mullins, Ch. 12 * Low, W.L. & Downey, J.A. "Cerebral Palsy," Ch. 9 in Downey & Low * Vining, E.P.G. et al. Cerebral Palsy, a pediatric developmentalist's overview, American Journal Dis. Child, 130, 643, 1976 (June)
	1:30-2:30	Audiological Evaluation of Young Handicapped Children Speaker: Robert Sanderson
	2:35-3:30	Questions and clarification with time for group discussion
JULY 9 Friday	9:30-10:45	Diagnosis and Evaluation of Children with Neuromuscular Disorders Speaker: Jerome S. Haller, M.D.
	11-12:30	Issues and Techniques in the Evaluation of Physically Handicapped Children Speaker: Penny Axelrod, Ed.D. Readings: Sattler, J.S. Assessment of Children's Intelligence and Special Abilities, Allyn & Bacon, 1982, pp. 76-82.
	1:30-3:30	Rehabilitation and Management of Children with Neuromuscular Disease Speaker: Agatha Colbert, M.D. Readings: Mullins, Ch. 24 Downey & Low, Ch. 11, Diseases of Muscle Travis, Ch. 15, Muscular Dystrophy: Duchenne' Form

* Taft, L.T. The care and management of the child with Muscular dystrophy, Developmental Medicine and Child Neurolor 1973, 15, 510-518.

JULY 12 Monday	9:30-10:45	The Child With Down's Syndrome: Medical Aspects Speaker: Margaret Siber, M.D.
	11-12:30	Speech and Language Intervention with the Young Handicapped Child Speaker: Lynn Konnerth, M.A., C.C.C. Readings: Batshaw & Perrett, Ch. 9, 18, 19
	1:30-3:30	Dental Care of Handicapped Children Speaker: Joyce LeFevre, B.S., R.D.H. Class will meet at the Tufts Dental Facility for the Handicapped on the grounds of the Fernald School, Trapelo Road, Belmont.
JULY 13 Tuesday	9:30-10:45	Seizures Speaker: Jerome S. Haller, M.D. Readings: Solomon G. & Plum, F. Clinical Management of Seizures: A Guide for the Physician, Saunders, 1976. Handouts from the Epilepsy Foundation
	11-12:30	Questions and clarifications followed by group discussion
	1:30-2:45	Physical Therapy Intervention with the Young Handicapped Child Speaker: MaryLouise Jani, B.S., R.P.T.
JULY 14 Wednesday	9:30-10:45	Families of Handicapped Children Speaker: Donald Wertlieb, Ph.D. Readings: Featherstone, H. A Difference in the Family Turnbull, & Turnbull Parents Speak Out
	11-12:30	Group discussion on the role of school personnel with families of handicapped children
	1:30-3:30	Technological Innovations for the Handicapped Child Speaker: Richard Foulds Class will meet in the Biomedical Engineering Department. Check on location.
JULY 15 Thursday	9:30-10:45	Open forum
	11-12:30	The Roles of the Educator: Presentation and Discussion Speakers: Kathleen Donnellan, M.A. Penny Axelrod, Ed.D. Bricker, D., Bricker, W., Iacino, R., Dennison, L. Intervention strategies for the severely and profoundly handicapped child. In Haring, N.G. & Brown, L.T. (eds) Teaching the Severely Handicapped Grune & Stratton, 1976, pp. 277-299.
	1:30-2:30 2:30-3:30	Observation of Audiological Evaluation Course Evaluation

Summer Institute, 1982
MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

FACULTY

Penny Axelrod, Ed.D., Institute Director
Assistant Professor, Eliot-Pearson Department of Child Study, Tufts University
Assistant Clinical Professor, Pediatrics, TUSM

Jerome S. Haller, M.D., Institute Medical Consultant
Pediatric Neurologist, Department of Pediatric Neurology
Associate Professor, Pediatrics, TUSM

Mary G. Ampola, M.D.
Pediatrician, Director, Pediatric Amino Acid Lab.
Associate Professor, Pediatrics, TUSM

Louis Bartoshesky, M.D.
Pediatrician, Center for Genetic Counseling & Birth Defect Evaluation
Assistant Professor, Pediatrics, TUSM

Agatha Colbert, M.D.
Physiatrist, Department of Rehabilitation Medicine
Assistant Professor, Rehabilitation Medicine and Instructor, Pediatrics, TUSM

Kathleen Donnellan, M.A.
Early Childhood Special Needs Consultant, Project CoNECT

Bruce L. Ehrenberg, M.D.
Director, EEG Laboratory
Assistant Professor, Neurology, TUSM

Richard Foulds
Director, Biomedical Engineering
Assistant Professor, Rehabilitative Medicine, TUSM

Bruce M. Gans, M.D.
Physiatrist, Director, Department of Rehabilitation Medicine
Associate Professor, Acting Chairman, Rehabilitation Medicine, TUSM

Mary-Louise Jani, M.S., R.P.T., N.D.T. Certified
Research Pediatric Physical Therapist, Department of Rehabilitation Medicine, TUSM

Lynn Konnerth, M.A., C.C.C.
Speech and Language Pathologist, North Shore Children's Hospital

Joyce LeFevre, R.D.H., B.S.
Dental Health Educator
Tufts Dental Facility for the Handicapped

Robert Sanderson, M.A.
Audiologist, Speech,Hearing and Language Center
Clinical Instructor, Otolaryngology, TUSM

Margaret Siber, M.D.
Pediatrician, Center for Genetic Counseling & Birth Defects Evaluation
Assistant Professor, Pediatrics, TUSM

Donald Wertlieb, Ph.D.
Director, Project CoNECT
Assistant Professor, Eliot-Pearson Department of Child Study, Tufts University
Senior Research Associate, Harvard Health Plan

*TUSM-Tufts University School of Medicine

6/22/82

TUFTS UNIVERSITY
ELIOT-PEARSON DEPARTMENT OF CHILD STUDY

CS 290
Deviations in Development and Learning

Sandra Baer
Summer, 1983

Meeting Place: Patten B
Tufts University School of Medicine
Stearns Building
116 Harrison Avenue

Texts: (R) Batshaw, M.L. & Perret, Y.M. Children with Handicaps: A Medical Primer, Paul H. Brookes, 1981.

(R) Bigge, June L. Teaching Individuals with Physical and Multiple Disabilities, Second Edition, Charles E. Merrill, 1982.

(R) Turnbull, A.P. & Turnbull, H.R. Parents Speak Out, Charles Merrill, 1978. A very powerful book which has greater impact than brevity would suggest.

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(R) Featherstone, H. A Difference in the Family, Penguin Paperbacks, 1980.

(R) Kolb, B. & Whishaw, I.Q. Fundamentals of Human Neuropsychology. W. H. Freeman, 1980. It is a well written, thorough reference book in the areas of neurology and psychology.

(R) (TUSM) Travis, G. Chronic Illness in Children, Stanford University Press, 1976.

R=on reserve at Wessell Library

TUSM= on reserve or a periodical at Tufts University Medical School Library

*=photocopy

June 27 Monday — 9:30-10:45

Thinking about the Brain: A Review for Educators of the Central Nervous System and Neuropsychology

Speaker: William D. Singer, M.D., Pediatric Neurologist, NEMCH

Readings:

Batshaw & Perret, Ch. 12.
(R) Kolb & Whishaw, Chapters 1-9.
(R) Teylor, T.J. The Brain Sciences: An Introductic in Education and the Brain, 77th Yearbook of the National Society for the Study of Education Pt. II, edited by Chall & Mirsky, 1978. Very readable.
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Geshchwind, N. Specializations of the human brain, pp. 180-199.
Hubel, D.H. The brain, pp. 44-53.
Kety, S.S. Disorders of the human brain, pp. 202-214.

11-12:30 — Overview of Causes of Mental Retardation, Patterns of Inheritance, Chromosomal Defects, Metabolic Disorders.

Speaker: Mary Ampola, M.D., Pediatrician, NEMCH

Readings:

Batshaw & Perret, Ch. 1-8.
Mullins, Ch. 4.

1:30-3:30 — The Developmental and Neurological Examination.

Speaker: William Singer, M.D.

Readings:

Batshaw & Perret, Ch. 11

Class will meet in the Tufts Medical School Library (2nd floor) to view videotapes.
For details of the neurological examination, please see:
(TUSM) Illingworth, R.S. The Development of the Infant and Young Child: Normal and Abnormal, Williams & Wilkins, 7th edition, 1980.
(TUSM) Touwen, B.C.L. & Prechtl, H.R.R. The Neurological Examination of the Child with Minor Nervous Dysfunction. J. B. Lippincott, 1970.

June 28 Tuesday — 9:30-10:45

The Child with Down's Syndrome: Medical Aspects

Speaker: Margaret Siber, M.D., NEMCH

	11:00-12:30	Mental Retardation: A Developmental Perspective Speaker: Sandy Baer, M.Ed. Film: A Dream Come True, a film of residential community (New England Villages) for mentally retarded adults. Readings: Batshaw & Perret, Ch. 11.
	1:30-3:30	Audiological Evaluation of Young Children with Special Needs Speaker: Robert Sanderson, Audiologist, NEMCH Readings: Batshaw & Perret, Ch. 18 Bigge, pp. 56-60.
June 29 Wednesday	9:30-10:45	Neurological Aspects of Cerebral Palsy Speaker: William Singer, M.D.
	11-12:30	Rehabilitation and Management of Children with Cerebral Palsy Speaker: Bruce Gans, M.D. Readings: Batshaw & Perret, Ch. 14 Mullins, Ch. 12 *Low, W. L. & Downey, J.A. "Cerebral Palsy," Ch. 9 in Downey & Low *Vining, E.P.G. et al. Cerebral Palsy, a pediatric developmentalist's overview, American Journal Dis. Child, 130, 643, 1976 (June)
	1:30-3:30	Physical Therapy Intervention with Young Handicapped Children Speaker: Lee Phillips, R.P.T. Readings: Bigge, Ch. 2.
June 30 Thursday	9:30-10:45	Diagnosis and Evaluation of Children with Neuromuscular Disorders Speaker: William Singer, M.D.
	11-12:30	Rehabilitation and Management of Children with Neuromuscular Disease Speaker: Agatha Colbert, M.D.

Readings:

Bigge, Ch. 2,9
Downey & Low, Ch. 11, Diseases of Muscle
Travis, Ch. 15, Muscular Dystrophy: Duchenne's Form
Mullins, Ch. 24
* Taft, L.T. The care and management of the child with muscular dystrophy, Developmental Medicine and Child Neurology, 1973, 15, 510-518.

1:30-3:30 Issues and Techniques in the Evaluation of Physically Handicapped Children

Speaker: Sandy Baer, M.Ed.

Film and discussion

Readings:

Sattler, J.S. Assessment of Children's Intelligence and Special Abilities, Allyn & Bacon, 1982, pp. 76-82.

July 5 Tuesday 9:30-10:45 Spina Bifida - Incidence, Etiology, Treatment and Management

Speaker: Louis Bartashesky, M.D.

Readings:

Mullins, Ch. 11
(TUSM) * Bull, M.J. et al, Myelodysplasia, Orthopedic Clinics of North America, April, 1976, pp. 475-499.
Downey & Low, Ch. 7, Spina Bifida
Travis, Ch. 17, Spina Bifida: Myelomeningocele Form

11-11:30 The EEG: Procedures

Speaker: Bruce Ehrenberg

Readings:

Batshaw & Perret, Ch. 15

11:30-12:30 Discussion/Questions

1:30-3:30 Speech and Language Intervention

Speaker: Christine Tierney, CCC/sp.

Readings:

Batshaw & Perret, Ch. 18, 19
Bigge, Ch. 4

July 6 Wednesday 9:30-10:45 Seizures

Speaker: William Singer, M.D.

Readings:
Batshaw & Perret, Ch. 15
(R)(TUSM)Solomon, G. & Plum, F. Clinical Management of of Seizures: A Guide for the Physician, Saunders, 1976.
Handouts from the Epilepsy Foundation

11:00-11:30 Neuroradiological Diagnostic Procedures

Reading:
* Duffy, F.H., Denckla, M.B., Bartels, P.H. & Sandim, G. Dyslexia: Regional differences in brain electrical activity by topographic mapping, Annals of Neurology, 7, 1980, pp. 412-420.

11:30-12:30 Questions, clarifications and group discussion

1:30-3:30 Dental Care of Handicapped Children

Speaker: Joyce LeFevre, B.S., R.D.H.

Class will meet at the Tufts Dental Facility for the Handicapped on the grounds of the Fernald School, Trapelo Road, Belmont.

July 7 Thursday 9:30-10:45 Families of Handicapped Children

Speaker: Donald Wertlieb, Ph.D.

Readings:
Featherstone, H. A Difference in the Family
Turnbull & Turnbull, Parents Speak Out

1100-12:30 Group discussion on the role of school personnel with families of handicapped children

1:30-3:30 Nonvocal Communication/Technological Innovations for the Handicapped Child

Speaker: Melanie Fried-Oken, M.A., CCC/sp.

Readings:
Bigge, Ch. 4, 10

Class will meet in the Biomedical Engineering Department. Check on location.

July 8 Friday

9:30-10:45 Occupational Therapy with Young Handicapped Children

Speakers: Ellen Cohn, O.T.
Alice Curnin, O.T.

Readings:
Bigge, Ch. 9-11

11:00-12:30 The Role of the Educator: Presentation and Discussion

Speakers: Kathleen Donnellan, M.A.
Sandy Baer, M.Ed.

Readings:
Bricker, D., Bricker, W., Iacino, R., Dennison, L Intervention Strategies for the Severely and Profoundly Handicapped child. In Haring, N.G. & Brown, L.T. (eds) Teaching the Severely Handicapped, Grune & Stratton, 1976, pp. 277-299 and in Thomas, M. Angele, Hey, Don't Forget About Me, CEC, 1976.

1:30-2:30 Open forum or observation of audiological evaluation

2:30-3:30 Course evaluation.

TUFTS UNIVERSITY
Eliot-Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

Summer Institute, 1983
MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

FACULTY

Sandra Baer, M.Ed., Institute Coordinator, Project CoNECT
Eliot-Pearson Department of Child Study
Special Needs Consultant, Eliot-Pearson Children's School

William Singer, M.D., Institute Medical Consultant
Pediatric Neurologist, Department of Pediatric Neurology
Associate Professor, Pediatrics, T.U.S.M.

Mary G. Ampola, M.D.
Pediatrician, Director, Pediatric Amino Acid Laboratory
Associate Professor, Pediatrics, T.U.S.M.

Louis Bartoshesky, M.D.
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T.U.S.M. = Tufts University School of Medicine 6/15/83

Tufts University
Eliot-Pearson Department of Child Study

CS 190
Deviations in Development and Learning

Sandra Baer
Summer, 1984

Meeting Places: 1) Boston Marriott Hotel, Copley Place
Monday, June 25 through morning of Friday, June 29.

2) Posner Hall, Room 122, afternoon of Friday, June 29
and Monday and Tuesday, July 2 and 3.
200 Harrison Ave.
Tufts University School of Medicine

Texts: (R) Batshaw, M. L. & Perret, Y.M. Children with Handicaps: A Medical Primer, Paul H. Brookes, 1981.

(R) Bigge, June L. Teaching Individuals with Physical and Multiple Disabilities, Second Edition, Charles E. Merrill, 1982.

(R) Turnbull, A.P. & Turnbull, H.R. Parents Speak Out, Charles Merrill, 1978. A very powerful book which has greater impact than brevity would suggest.

The following four books should be used as references for further reading to supplement the texts:

(R) (TUSM) Downey, J.A. & Low, N.L. The Child with Disabling Illness. W. B. Saunders, 1974.

(R) Featherstone, H. A Difference in the Family, Penguin Paperbacks, 1980.

(R) Kolb, B. & Whishaw, I.Q. Fundamentals of Human Neuropsychology. W. H. Freeman, 1980. It is a well written, thorough reference book in the areas of neurology and psychology.

(R) (TUSM) Travis, G. Chronic Illness in Children, Stanford University Press, 1976.

R = on reserve at Wessell Library

TUSM = on reserve or a periodical at Tufts University Medical School Library

* = photocopy in your folder.

June 25 Monday — 8:30-12:30 Fundamentals:

Pediatric Rehabilitation, B. Gans, M.D.

Physical Therapy, S. Harris, Ph.D., R.P.T.

Occupational Therapy, M. Szczepanski, O.T.R.

Communication Profile, L. Daniels-Miller, Sc.D., C.C.C.-Sp.

2:00-3:15 Thinking about the Brain: A Review for Educators of the Central Nervous System and Neuropsychology, W. Singer, M.D., Pediatric Neurologist, NEMCH

Readings:

Batshaw & Perret, Ch. 12

(R) (TUSM) For a readable discussion of several aspects of the brain, see the following articles in Scientific American, 1979, 241 (September):

* Geschwind, N. Specializations of the human brain, pp. 180-199.
* Hubel, D.H. The brain, pp. 44-53.
* Kety, S.S. Disorders of the human brain, pp. 202-214.

3:30-4:30 The Developmental and Neurological Examination: Videotapes, W. Singer, M.D.

Readings:

Batshaw & Perret, Ch. 11

For details of the neurological examination, please see:

(TUSM) Illingworth, R. S. The Development of the Infant and Young Child: Normal and Abnormal, Williams & Wilkins, 7th edition, 1980.

(TUSM Touwen, B.C.L. & Prechtl, H.R.R. The Neurological Examination of the Child with Minor Nervous Dysfunction. J. B. Lippincott, 1970.

June 26 Tuesday — 8:30-12:30 Cerebral Palsy:

Neurological Aspects, W. Singer, M.D.

Aspects of Physical Therapy, S. Harris, Ph.D., R.P.T.

Orthopedic Aspects, C. Craig, M.D.

Oral-Motor Development, R. Alexander, Ph.D.

"Putting It All Together," Panel of above speakers, B. Gans, M.D., Moderator

Readings:

Batshaw & Perret, Ch. 14

*Low, W. L. & Downey, J.A. "Cerebral Palsy," Ch. 9 in Downey & Low

*Vining, E.P.G. et al. Cerebral Palsy, a pediatric developmentalist's overview, American Journal Dis. Child, 130, 643, 1976 (June).

2:00-5:00 Psychosocial Issues

Part I: Impact of Disability on the Family,
A. Jones, B.S.N.; J. Robins Miller, M.S.W., L.I.C.S.W.

Part II: Sexuality, P. Simons, R.N., C.P.N.P.

Readings:

*Travis, Ch. 3, The Experience of Chronic Illiness in Childhood.

June 27 Wednesday 8:30-9:30 Managing the Child with Muscular Dystrophy, A. Colbert, M.D.

Readings:

Bigge, Ch. 2,9

*Travis, Ch. 15, Muscular Dystrophy: Duchenne's Form

*Taft, L. T. The care and management of the child with muscular dystrophy, Developmental Medicine and Child Neurology, 1973, 15, 510-518.

9:30-10:15 Law and the Handicapped Child, K. Kolpan, J.D.

10:45-11:30 Psychosocial Development of the Physically Disabled Child, D. Elkind, Ph.D.

Readings:

*Travis, Ch. 15 (p. 410-420)

11:30-12:30 Outcome: The Disabled Child Grows Up, Panel, S. Howe, M.S., C.R.C., Moderator

12:30-2:00 Keynote Luncheon

2:00-4:00 Course Business
Discussion of Requirements
Discussion of Presentations/Issues to Date

June 28 Thursday

8:30-9:30 Managing the Child with Myelodysplasia, A. Colbert, M.D.

Readings:

(TUSM)* Bull, M. J. et al, Myelodysplasia, Orthopedic Clinics of North America, April, 1976, pp. 475-499.

Downey & Low, Ch. 7, Spina Bifida

* Travis, Ch. 17, Spina Bifida: Myelomeningocele Form

9:30-10:15 Head Injury: Medical Rehabilitation, M. Alexander, M.D.

10:45-11:30 Head Injury: Psychosocial Aspects, M. Rosenthal, Ph.D.

Reading:

* Travis, Ch. 10, Head Injury

11:30-12:30 The Respirator Dependent Child: An Increasing Rehabilitation Concern, J. Robins Miller, M.S.W., L.I.C.S.W.

2:00-5:00 Expressive Communication Devices, M. Fried-Oken, Ph.D., C.C.C.-Sp.

Reading:

Bigge, Ch. 4, 10

June 29 Friday

8:30-9:15 Pediatric Rheumatologic Disorders, J. Schaller, M.D.

Reading:

* Travis, Ch. 12, Juvenile Rheumatoid Arthritis

9:15-10:00 High Technology for the Disabled Child, B. Gans, M.D.

10:30-11:15 Education for the Disabled Child, R. Brown, Ph.D.

11:15-12:00 Legal Considerations for the Rehabilitation Professional, K. Kolpan, J.D.

12:00-12:15 Closing Remarks, Pediatric Rehabilitation Course

12:15-12:30 Evaluation of Course on Pediatric Rehabilitation

AT NEW ENGLAND MEDICAL CENTER, POSNER 122

2:00-2:30 Course Business

2:30-4:30 Audiological Evaluation of Young Children with Special Needs, Presentation and Visit to Speech and Language Clinic, Donna Moyer, M.A., C.C.C.-St.

Readings:

Batshaw & Perret, Ch. 18

Bigge, pp. 66-69

July 2 Monday — 9:30-10:30 Diagnosis and Evaluation of Children with Neuromuscular Disorders, W. Singer, M.D.

Readings:

Bigge, Ch. 2,9

* Travis, Ch. 15, Muscular Dystrophy: Duchenne's Form

* Taft, L. T. The care and management of the child with muscular dystrophy, Developmental Medicine and Child Neurology, 1973, 15, 510-518.

10:30-11:30 Seizures: Diagnosis, Treatment and Management

Readings:

Batshaw & Perret, Ch. 15.

(R)(TUSM) Solomon, G. & Plum, F. Clinical Management of Seizures: A Guide for the Physician, Saunders, 1976.

11:30-12:00 Neuroradiological Diagnostic Procedures

Reading:

* Duffy, F. H., Denckla, M.B., Bartels, P.H. & Sandim, G. Dyslexia: regional differences in brain electrical activity by topographic mapping, Annals of Neurology, 7, 1980, pp. 412-420.

12:00-12:30 Questions and discussion

12:30-1:45 Group Lunch

2:00-3:30 Roles of the Educator, S. Baer, M.Ed.

Reading:

* Bricker, D. in Thomas, M. Angele, Hey, Don't Forget About Me, CEC, 1976.

July 3 Tuesday — 9:30-11:00 Overview of Causes of Mental Retardation, Patterns of Inheritance, Chromosomal Defects, Metabolic Disorders, Mary Ampola, M.D.

Reading:

Batshaw & Perret, Ch. 1-8.

11:15-12:30 The Child with Down's Syndrome: Medical Aspects, M. Siber, M.D.

Reading:

Batshaw & Perret, Ch. 1-8.

1:30-3:00 Mental Retardation: A Developmental Perspective, S. Baer, M.Ed.

Film: A Dream Come True, a film of residential community (New England Villages) for mentally retarded adults.

Reading:

Batshaw & Perret, Ch. 11.

3:00-3:30 Course Business/Summary
Course Evaluation

MONDAY, June 25, 1984

- [illegible] Registration
- 9:00 Welcome and Introduction

Fundamentals:

- 9:15 Pediatric Rehabilitation — B. Gans, M.D.
- 9:45 Physical Therapy — S. Harris, Ph.D., R.P.T.
- 10:00 Break
- 10:30 Occupational Therapy — M. Szczepanski, O.T.R.
- 11:00 The Disabled Child: A Multi-faceted Communication Process — L. Daniels Miller, Sc.D., C.C.C., Sp.
- 12:30 Lunch (on your own)

SPECIAL INTEREST TOPICS

2:00 - 5:00

Participants will register for one special interest topic

- A. Medical Approaches to Spasticity Management — B. Gans, M.D.
- B. Sensory Integration: Applications of Theory and Treatment to Varied Pediatric Populations — M. Szczepanski, O.T.R.
- C. Introduction to an Observational Scale: Movement Assessment of Infants — S. Harris, Ph.D., R.P.T.
- D. Communication Candidates: Nonlinguistic and Tracheotomized Children — M. Hoffman, M.S., C.C.C.-Sp.; A. Tuck, M.S., C.C.C.-Sp.

*2:00-4:30 **Review of Central Nervous System, Developmental and Neurological Examination**
W. Singer, M.D.

5:00 **Reception**

TUESDAY, JUNE 26, 1984

CEREBRAL PALSY:

- 8:30 Neurological Aspects — W. Singer, M.D.
- 9:15 Aspects of Physical Therapy — S. Harris, Ph.D., R.P.T.
- 10:00 Break
- 10:30 Orthopedic Aspects — C. Craig, M.D.
- 11:15 Oral Motor Development — R. Alexander, Ph.D.
- 12:00 "Putting It All Together" — R. Alexander, Ph.D.; C. Craig, M.D.; S. Harris, Ph.D.; W. Singer, M.D.; B. Gans, M.D., Moderator
- Multi-disciplinary Panel
- 12:30 Lunch (on your own)

SPECIAL INTEREST TOPICS

2:00 - 5:00

Participants will register for one special interest topic.

- E. Pediatric Electromyography — M. Alexander, M.D.
- F. Hands-on Demonstration of Oral-Motor Assessment — R. Alexander, Ph.D., C.C.C.-Sp.
- G. Seating and Positioning — S. Hallenborg, R.P.T.; D. MacLeod, R.P.T.
- * H. Psychosocial Issues
  - Part I: Impact of Disability on the Family — A. Jones, B.S.N.; J. Robins Miller, M.S.W., L.I.C.S.W.
  - Part II: Sexuality — P. Simons, R.N., C.P.N.P.

WEDNESDAY, JUNE 27, 1984

- 8:30 Managing the Child with Muscular Dystrophy — A. Gilbert, M.D.
- 9:30 Law and the Handicapped Child — K. Kolpan, J.D.
- 10:15 Break
- 10:45 Psychosocial Development of the Physically Disabled Child — D. Elkind, Ph.D.
- 11:30 Outcome: The Disabled Child Grows Up — Panel; S. Howe, M.S., C.R.C., Moderator
- 12:30 2:00 KEYNOTE LUNCHEON

*2:00-4:00 **Course Business, Course Requirements, Discussion of Presentations to Date**

THURSDAY, JUNE 28, 1984

- 8:30 Managing the Child with Myelodysplasia — A. Gilbert, M.D.
- 9:30 Head Injury: Medical Rehabilitation — M. Alexander, M.D.
- 10:15 Coffee
- 10:45 Head Injury: Psychosocial Aspects — M. Rosenthal, Ph.D.
- 11:30 The Respirator Dependent Child: An Increasing Rehabilitation Concern — J. Robins Miller, M.S.W., L.I.C.S.W.
- 12:30 Lunch (on your own)

SPECIAL INTEREST TOPICS

2:00 - 5:00

Participants will register for one special interest topic

- I. Orthotics: Principles and Assessment — M. Alexander, M.D.; K. Papit, R.P.T.
- * J. Expressive Communication Devices — M. Fried-Oken, Ph.D., C.C.C.-Sp.
- K. Mobility Systems for the Disabled Child — P. Bartoshesky, M.A., S. Hallenborg, R.P.T., D. MacLeod, R.P.T.

FRIDAY, JUNE 29, 1984

- 8:30 Pediatric Rheumatologic Disorders — J. Schaller, M.D.
- 9:15 High Technology for the Disabled Child — B. Gans, M.D.
- 10:00 Break
- 10:30 Education for the Disabled Child — R. Brown, Ph.D.
- 11:15 Legal Considerations for the Rehabilitation Professional — K. Kolpan, J.D.
- 12:00 Closing Remarks
- 12:15 Evaluation

N.E. Med. Center

*2:00-2:30 **Course Business**
*2:30-4:30 **Audiological Eval of Young Children with Special Needs: Visit to Sp./Lang. Clinic**
Donna Moyer, M.A., C.C.C.-Sp.

MONDAY, JULY 2, 1984 - N.E. Med. Center

*9:30-10:30 **Diagnosis and Evaluation of Children with Neuromuscular Disorders**
W. Singer, M.D.
*10:30-11:30 **Seizures: Diagnosis, Treatment and Management**
*11:30-12:00 **Neuroradiological Diagnostic Procedures**
*12:00-12:30 **Questions and Discussion**
*12:30-1:45 **Group Lunch**
*2:00-3:30 **Roles of the Educator**
S. Baer, M.Ed.

TUESDAY, JULY 3, 1984 - N.E. Med. Center

*9:30-11:00 **Overview of Causes of Mental Retardation, Patterns of Inheritance, Chromosomal Defects, Metabolic Disorders**
Mary Ampola, M.D.
*11:15-12:30 **The Child with Down's Syndrome: Medical Aspects**
M. Siber, M.D.
*1:30-3:00 **Mental Retardation: A Developmental Perspective**
S. Baer, M.Ed.
*3:00-3:30 **Course Business/Summary/Course Evaluation**

* FOR PROJECT CONNECT PARTICIPANTS AND CS 190 STUDENTS

TUFTS UNIVERSITY
Eliot Pearson Department of Child Study

PROJECT COllaborative Network for Early Childhood Training

Summer Institute, 1984
MEDICAL AND REHABILITATIVE ASPECTS OF CHILDHOOD DISORDERS

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T.U.S.M. = Tufts University School of Medicine

6/18/84

Appendix H
Summer Institute Pre-Test and Post-Test

TUFTS UNIVERSITY

TO: Summer Institute Participants

FROM: Sandra Baer, Institute Coordinator

DATE: June 7, 1984

SUBJECT: Pretest

Please complete the attached pretest and bring it with you the first day of class. It will not be graded. The pretest is designed to help you identify areas of knowledge related to handicapping conditions in which you seem to need further information. (You are not expected to know all the answers!)

See you soon,

Sandy

Summer Institute, 1984
Medical and Rehabilitative Aspects of Childhood Disorders

PRETEST

Name: _____

Prepared by Penny Axelrod, Ed.D.
with modification by Sandra Baer, M.Ed.

1. Define the following terms:

gene:

chromosome:

2. Draw lines to match defect with disorder

DEFECT	DISORDER (Syndrome)
45 autosomes + 2	Cleft lip/palata
Full complement of autosomes + a single x	PKU
Inborn error of protein metabolism	Klinefelter's Syndrome
Multifactorial genetic defects	Down's Syndrome
Full complement of autosomes + xxy	Turner's Syndrome
	Spina Bifida

3. What types of disorders are most frequently determined through amniocentesis?

1.

2.

3.

4. What is the probability of having normal, affected and carrier child(ren) born to:

a. parents where the mother is a known carrier of an x-linked disorder (e.g. muscular dystrophy, color blindness and hemophilia) and the father is normal?

Males: normal ____% affected ____% carrier ____%

Females: normal ____% affected ____% carrier ____%

b. parents where the mother is a known carrier (of x-linked disorder) and father is affected?

Males: normal ____% affected ____% carrier ____%

Females: normal ____% affected ____% carrier ____%

5. What is meant by a congenital disorder?

6. Name four physical stigmata in a child with Down's syndrome.

7. For what reasons should you consider requesting that a child be given a neurological examination?

   1.

   2.

   3.

   4.

8. What are the characteristic signs and symptoms of Duchenne muscular dystrophy?

9. How is muscular dystrophy diagnosed?

10. Name four characteristic physical problems associated with spina bifida.

    1.

    2.

    3.

    4.

11. Describe the role of a shunt in a child with hydrocephalus.

12. If you have concerns about a young handicapped child's hearing, what are the 3 components of an audiological examination that you would expect to see done?

    1.

    2.

    3.

13. State 5 possible causes for seizures.

    1.

    2.

    3.

    4.

    5.

14. What information is obtained from an EEG?

15. What are some characteristic symptoms of petit-mal seizures?

of psychomotor seizures?

16. State 4 characteristics necessary for diagnosing a child as having cerebral palsy?

1.

2.

3.

4.

17. Give 4 conditions/situations which are <u>associated with</u> or <u>causing</u> cerebral palsy.

1.

2.

3.

4.

18. Define the following terms:

spastic cerebral palsy _____

athetoid cerebral palsy _____

diplegia _____

hemiplegia _____

paraplegia _____

19. Name 3 deficits that are associated with cerebral palsy, e.g. speech impairment:

1.

2.

3.

20. Describe the role(s) of the following professionals:

a. physiatrist:

b. physical therapist:

c. occupational therapist:

NAME: _____

Tufts University

Eliot-Pearson Department of Child Study

CS 190
Deviations in Development and Learning

Ms. Sandra Baer
Summer, 1984

FINAL EXAM -- Due no later than July 17, 1984. Mail or give directly to Mrs. Marjorie Manning, Eliot-Pearson Department of Child Study, Tufts University, Medford, MA 02155.

PLEASE ANSWER QUESTIONS BRIEFLY: Single words, phrases, short paragraphs are just fine.
Observe space limitations for your answers.

Select one example of a disorder from each of three genetic patterns of inheritance and draw the pattern of inheritance from parents to children.

1.

2. Disorder

3.

4. Disorder

5.

6. Disorder

What is the probability of having normal, carrier and affected child(ren) born to:

7. parents who are carriers of the sickle cell gene?

normal _____% carrier _____% affected _____%

8. parents where the mother is a known carrier of an x-linked defect? (father is normal)

Males: normal _____% carrier _____% affected _____%

Females: normal _____% carrier _____% affected _____%

Amniocentesis is a procedure that, if done by an experienced, competent physician in combination with ultra sound, carries less than ½ of 1% of a chance for miscarriage. Would a physician recommend amniocentesis in the following cases and why?

9. a woman who is 42 years of age. Yes No Why? _____

_____

10. a woman who has previously given birth to a child with myelomeningocele. Yes No Why? _____

_____

11. a woman who has previously given birth to a child with Duchenne muscular dystrophy. Yes No Why? _____

_____

12. a woman who has a child who is handicapped as a result of maternal rubella Yes No Why? _____

_____

13. a woman who has a child with cystic fibrosis. Yes No Why? _____

_____

14. & 15. If amniocentesis and the following analysis of the karyotype revealed normal chromosomes, normal levels of alpha feto protein and the presence of the one enzyme that was analyzed, what 4 pieces of information could you tell the parents?

_____

_____

_____

_____

16. List four possible pre-natal insults which can cause birth defects.

_____

_____

_____

_____

17. List four possible post-natal causes of mental retardation.

_____

_____

_____

18. List four medical problems associated with Down's Syndrome.

19. The neurologists of the late 1800's and early 1900's suggested that the left hemisphere was responsible for language functioning. What new evidence do we have to suggest that this was too simplistic a view?

20. Give three valid reasons for an educator to ask a child's pediatrician to consider a referral to a neurologist.

21. & 22. After a pediatric neurologist has taken a thorough history, what aspects of the central nervous system would you expect to be examined?

23. & 24. Circle True or False for the following statements about cerebral palsy.

T F All people with cerebral palsy have difficulty speaking.

T F Cerebral palsy can be cured with the right treatment.

T F A person with cerebral palsy cannot have above average intelligence.

T F The physical picture we see usually is indicative of a C.P.'s cognitive ability.

Give an example of a pre-, peri- and post-natal cause of cerebral palsy (congenital or early acquired non-progressive encephalopathy).

25. pre-

26. peri-

27. post-

28. & 29. What are 4 disorders that are associated with cerebral palsy and what professional(s) would you expect to diagnose and/or treat the disorder?

Associated disorders	Professionals
_____	_____
_____	_____
_____	_____
_____	_____

30.-32. Match the following types of cerebral palsy with its definition.

Tremor	lower extremity involvement only
Atonia	abnormal involuntary movement
Rigidity	extreme tenseness and resistance to movement
Mixed type	lack of muscle tone, muscles seem to be limp and flacid
Paraplegia	rhythmic, regular involuntary fine muscular movement
Athetosis	combination of types in varying degrees

33. List three possible methods of managing spasticity.

_____

_____

_____

34.-36. Briefly define the following terms:

spina bifida occulta _____

_____

meningocele _____

_____

myelomeningocele _____

_____

37.-38. Children with spina bifida often develop hydrocephalus. State three possible causes of hydrocephalus. Give the role of the shunt.

Causes _____

_____

_____

Role of the shunt _____

_____

_____

_____

39.-42. There are many hospital-based professionals who might be involved in the long-term management of a child with a high spina bifida lesion. Briefly describe the role of at least eight members of the team.

Professional	Role
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

43.-45. Two points of view are often voiced regarding the maintenance of mobility for physically handicapped children. One view holds that mobility itself is important so it should be made easy (with use of wheelchairs) and another view suggests that the child should be independently mobile for as long as possible (braces, walkers, surgery to correct shortened tendons, etc.). State your viewpoint, and give reasons to support that view. Limit your answer to the lines on the top of the following page.

46.-49. Describe what you might imagine to be the roles of an occupational therapist and a physical therapist for a teenager with spina bifida who wears long leg braces.

Occupational Therapist

Physical Therapist

50.-51. Would you expect th[illegible]earing loss caused by the following conditions could be medically or surg[illegible]y remediated?

Rubella	Yes	No
otitis media	Yes	No
cleft palate	Yes	No
encephalitis	Yes	No

52.-55. Middle ear effusions are very common in early childhood. Describe the normal role of the middle ear and what occurs when a child has otitis media.

56. What is the role of "tubes" for otitis media?

57. Circle True or False for the following statements about hearing loss.

T F Sensorineural losses are more responsive to hearing aids than conductive losses.

T F To date there is no effective way of getting specific threshold information on infants and unresponsive patients.

58.-59. A child has a grand mal seizure disorder and wears an ID. What 3 essential pieces of information should be on that ID?

60.-61. What should you do if a person in your presence has a grand mal seizure?

62. What should no NOT do?

63. What observable characteristics might lead you to suspect a petit mal seizure disorder in an elementary school age child?

64. Answer True or False

_____ A normal EEG means you don't have seizures.

_____ An abnormal EEG without seizures should be treated.

_____ A seizure disorder is improved because an EEG is normal.

65.-66. A youngster has just been referred to a major medical center's multi-disciplinary clinic. What 4 recommendations might you give to the family prior to the first visit?

_____

_____

_____

_____

67.-68. Match the diagnostic instrument/procedure with the childhood disorder.

sweat test	diabetes
EEG	Klinefelter's syndrome
chromosome analysis	Duchenne Muscular Dystrophy
CT scan	cystic fibrosis
electromyogram	grand mal seizure
	hydrocephalus
	PKU

(There are some decoys here.)

69.-70. List four basic differences between upper motor neuron involvement (i.e. cerebral palsy) and lower motor neuron involvement (i.e. neuromuscular disorders).

CP	Neuromuscular Disorders
_____	_____
_____	_____
_____	_____
_____	_____

71.-73. According to Susan Harris, P.T., the use of standardized assessment tools by "developmental therapists" is crucial for three major reasons. List these reasons.

_____

_____

_____

75. Margery Szczepanski, O.T., stressed the importance of helping children maintain the balance between three types of skills. List the three types of skills she cited.

_____

_____

_____

76. In her presentation on Oral-Motor Development of the Child with C. P., what did Rona Alexander cite as one of the most common "presenting problems" seen at her rehabilitation center?

_____

77. What did Jeff's parents find to be the most helpful emotional outlet for them in coping with the stresses resulting from their son's disease, Duchenne Muscular Dystrophy. (Workshop on Psychosocial Issues: Part I - Impact of Disability on the Family)

78. What did you find to be most striking about the film "Like Other People" with regard to sexuality issues.

_____

_____

_____

_____

_____

79. Circle True or False for the following statements about rheumatic diseases of childhood.

T F Since we know what causes all of these diseases, treatment and management techniques are generally quite clear-cut.

T F More boys than girls suffer from systemic onset juvenile rheumatoid arthritis (JRA).

T F With JRA, onset usually occurs at or before age 10.

T F Swimming is commonly recommended for individuals with JRA.

80. List four psychosocial consequences of head injury in childhood.

_____

_____

_____

_____

Enjoy the rest of your summer!

Sandy

Appendix I
Advisory Board

Advisory Board
Multidisciplinary Training for Educators of Young, Handicapped Children

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April 4, 1985

Ms. Janet Drill
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Dear Janet:

As we discussed by phone today, please revise the enclosed bibliographic entry to list as authors:

Donald Wertlieb and Patricia Place - Multidisciplinary Training for Educators of Young Severely Handicapped Children.

Sincerely,

Donald Wertlieb
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DW:tn
Enc.

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